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101st Congress *1st Session*	SENATE	Report 101-81

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEARS 1990 AND 1991

REPORT

[TO ACCOMPANY S. 1352]

ON

AUTHORIZING APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEARS FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

TOGETHER WITH

ADDITIONAL VIEWS

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

July 19 (legislative day, January 3), 1989.—Ordered to be printed

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(101st Congress, 1st Session)

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Report
101–81

AUTHORIZING APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEARS FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

July 19, 1989.—Ordered to be printed

Filed under authority of the order of the Senate of July 19 (legislative day, January 3), 1989

Mr. Nunn, from the Committee on Armed Services, submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany S. 1352]

The Committee on Armed Services reports favorably an original bill to authorize appropriations during fiscal years 1990 and 1991 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal years for the Armed Forces, and for other purposes, and recommends that the bill do pass.

PURPOSE OF THE BILL

This bill would:

(1) authorize appropriations for (a) procurement, (b) research, development, test and evaluation, (c) operation and maintenance and the revolving and management funds of the Department of Defense for fiscal years 1990 and 1991;

(2) authorize the personnel end strength for each military active duty component of the Armed Forces for fiscal years 1990 and 1991;

(3) authorize the personnel end strengths for the Selected Reserve of each of the reserve components of the Armed Forces for fiscal years 1990 and 1991;

(4) authorize the annual average military training student loads for each of the active and reserve components of the Armed Forces for fiscal years 1990 and 1991;

(5) impose certain reporting requirements;

(6) impose certain limitations with regard to specific procurement and RDT&E actions and manpower strengths; provide certain additional legislative authority, and make certain changes to existing law;

(7) authorize appropriations for military construction programs of the Department of Defense for fiscal years 1990 and 1991;

(8) authorize appropriations for national security programs of the Department of Energy for fiscal years 1990 and 1991; and

(9) authorize appropriations for civil defense, including programs of the Federal Emergency Management Agency, for fiscal year 1990.

OTHER MEASURES REPORTED BY THE COMMITTEE

In addition to this bill, the committee reported a number of other measures authorizing activities for the Department of Defense and the Department of Energy. These measures included:

(1) a bill authorizing $1.923 billion in fiscal year 1990 and $2.131 billion in fiscal year 1991 for procurement of equipment for reserve component forces;

(2) a bill authorizing $596.8 million in fiscal year 1990 and $336.8 million in fiscal year 1991 for procurement of missiles and guided weapons;

(3) a bill authorizing $30 million in fiscal year 1990 for the Soldier/Marine Enhancement Program; and

(4) a bill providing for environmental, safety, and management improvements at the Department of Energy, including authorization of $1.819 billion for fiscal year 1990.

These four items were reported out as individual bills and are not included in this bill. However, the funds associated with these four measures are included in the tables in this report for the convenience of the reader, and certain explanatory material is included in this report. It is anticipated that these four measures will be offered as floor amendments for the consideration of the Senate during its debate on the defense authorization bill.

TWO-YEAR AUTHORIZATION RECOMMENDATIONS IN COMMITTEE BILL

The administration's revised request for the national defense function of the federal budget for fiscal year 1990 is $305.5 billion in budget authority, of which $223 billion is for programs which require authorization. For fiscal year 1991, the President's revised budget authority request is $321.2 billion, of which $238 billion requires authorization.

The bill reported by the committee includes an authorization recommendation of approximately $223 billion for fiscal year 1990 and $203 billion for fiscal year 1991.

The authorization request, and thus the committee's authorization recommendation, is substantially less than the functional ceiling for national defense. The primary reason for this is that, although military end strengths and pay raises require authorization, the actual funding for military pay and benefits (approximately $79 billion) is not reflected in this legislation. Programs for which authorizing legislation is required include procurement, research and development, operation and maintenance, revolving and management funds, military construction and family housing, weapons programs of the Department of Energy, and civil defense.

BIENNIAL BUDGETING

The committee continues to support fully the concept of biennial budgeting and remains convinced that two-year planning will substantially improve defense program stability as well as the quality of congressional oversight. However, the committee was unable to recommend authorizations for all programs in the second year of the request because of uncertainty over whether the administration's overall fiscal year 1991 budget meets the Gramm-Rudman-Hollings deficit targets, and because Congress and the administration have been unable to reach a budget agreement for fiscal year 1991.

The committee sought to authorize the maximum amount of programs in fiscal year 1991 by concentrating on stable programs. Through this approach, the committee recommends authorization for 85 percent of the total requested for fiscal year 1991, or $203 billion. Unless otherwise noted in the report, the absence of an authorization in fiscal year 1991 does not represent a prejudicial action by the committee.

BUDGET DEFICIT OF COMMITTEE BILL

Discussions among the President and the congressional leadership in April 1989 resulted in an agreement that national defense funding for fiscal year 1990 would be $305.5 billion in budget authority and $299.2 billion in outlays. This agreement was formalized in the Fiscal Year 1990 Congressional Budget Resolution. The President's revised budget request complies with the budget authority target of this agreement. However, due to technical and estimating differences between the administration and the Congressional Budget Office, the actual spending, or outlays, associated with the President's revised request may be as much as $3 to $4 billion above the target in the budget resolution.

Accounting for all recommendations included in the committee bill, both in areas requiring specific authorization of funds and in the personnel and other sections of the bill, the budget authority implication of the committee bill is $305.5 billion. The committee bill also includes a provision, section 903, which limits the total expenditures of the Department of Defense during fiscal year 1990 to a level within the budget agreement of $299.2 billion. Thus, the committee bill meets both the budget authority and outlay targets in the Budget Resolution.

EXPLANATION OF FUNDING SUMMARY

The following table provides a summary of both direct authorizations and related budget authority levels for fiscal years 1990 and 1991 which are included in this legislation.

The columns relating to the authorization request and amounts authorized in this bill do not include funding for the following items: military personnel funding not requiring authorization; military construction authorizations granted in prior years; and other small portions of the defense function not within the authorization jurisdiction of this committee. In addition, the authorization request has been reduced to reflect existing milestone authorizations granted in Public Law 100–180 (the National Defense Authorization Act for Fiscal Years 1988 and 1989), which are discussed in title I of this report.

All of the above amounts are included in the column relating to the budget authority request and the implication of this bill for total defense budget authority.

In addition, the summary table includes the committee's funding recommendations for the four related, but separately reported, bills outlined in a previous section.

SUMMARY OF FUNDS RECOMMENDED FOR AUTHORIZATION

	FY1990					FY1991				
	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication
Aircraft Procurement, Army	2,906.1	2,706.5	2,906.1	(199.6)	2,706.5	3,038.2	2,742.1	3,038.2	(296.1)	2,742.1
Missile Procurement, Army	2,566.7	2,748.3	2,661.6	227.5	2,889.1	2,803.9	2,798.8	3,003.8	(5.2)	2,998.6
Weapons & Tracked Combat Vehicles	2,724.0	2,637.6	2,724.0	(86.4)	2,637.6	2,781.6	3,120.1	2,781.6	338.5	3,120.1
Procurement of Ammunition, Army	1,704.8	1,697.4	1,704.8	(7.4)	1,697.4	1,574.0	1,617.3	1,574.0	43.3	1,617.3
Other Procurement, Army	3,192.9	2,892.7	4,169.1	(391.7)	3,777.4	3,857.2	3,745.8	3,925.8	(111.4)	3,814.4
Aircraft Procurement, Navy	8,673.0	8,346.8	8,826.1	(326.2)	8,499.9	9,086.3	9,200.2	9,517.9	113.9	9,631.8
Weapons Procurement, Navy	3,910.4	4,012.6	5,725.0	203.3	5,928.3	4,465.2	3,589.5	6,000.4	(320.4)	5,680.0
Shipbuilding & Conversion, Navy	9,550.6	9,756.5	9,550.6	205.9	9,756.5	11,021.5	12,362.0	11,021.5	1,340.5	12,362.0
Other Procurement, Navy	4,915.0	6,314.3	4,915.0	1,399.3	6,314.3	5,697.2	6,592.5	5,697.2	895.3	6,592.5
Procurement, Marine Corps	1,196.8	1,178.0	1,196.8	(18.8)	1,178.0	1,398.0	1,090.9	1,398.0	(307.1)	1,090.9
Aircraft Procurement, Air Force	16,787.2	15,930.6	16,787.2	(856.6)	15,930.6	18,243.8	13,957.1	18,243.8	(4,286.7)	13,957.1
Missile Procurement, Air Force	7,382.2	7,119.3	7,382.2	(262.9)	7,119.3	10,087.6	6,002.1	10,087.6	(4,085.5)	6,002.1
Other Procurement, Air Force	8,561.8	8,450.2	8,561.8	(111.6)	8,450.2	9,096.2	8,030.7	9,096.2	(1,065.5)	8,030.7
Procurement, Defense Agencies	1,321.8	1,284.4	1,321.8	(37.4)	1,284.4	1,429.7	1,115.2	1,429.7	(314.5)	1,115.2
National Guard and Reserve Equipment		1,923.4		1,923.4	1,923.4		2,131.0		2,131.0	2,131.0
Defense Production Act Purchases			10.5		10.5			13.6		13.6
Chemical Agents & Munitions Destruction	311.4	311.4	311.4		311.4	317.7	317.7	317.7		317.7
Defense Inspector General	1.1					1.0				
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Total Procurement	75,705.8	77,309.9	78,754.0	1,660.8	80,414.8	84,899.1	78,412.9	87,147.0	(5,929.9)	81,217.1
R,D,T & E, Army	5,648.8	5,723.9	5,693.5	75.1	5,768.6	6,027.7	5,717.7	6,027.7	(310.0)	5,717.7
R,D,T & E, Navy	9,590.5	9,928.9	9,830.3	341.1	10,171.4	9,251.1	8,573.7	9,336.4	(677.4)	8,659.0
R,D,T & E, Air Force	14,551.9	14,629.9	14,551.9	78.0	14,629.9	13,505.3	9,864.3	13,505.3	(3,641.0)	9,864.3
R,D,T & E, Defense Agencies	8,965.8	9,015.9	8,965.8	50.1	9,015.9	10,030.5	4,015.5	10,030.5	(6,015.0)	4,015.5
Developmental Test and Evaluation	309.3	294.3	309.3	(15.0)	294.3	434.7	434.7	434.7		434.7
Operational Test and Evaluation	194.5	164.5	194.5	(30.0)	164.5	160.4	160.4	160.4		160.4
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Total Research & Development	39,260.9	39,757.4	39,545.3	499.3	40,044.6	39,409.7	28,766.4	39,495.0	(10,643.4)	28,851.6

	FY1990					FY1991				
	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication
Operation and Maintenance, Army	23,708.6	23,453.7	23,708.6	(254.9)	23,453.7	24,876.9	24,589.9	24,876.9	(287.0)	24,589.9
Operation and Maintenance, Navy	25,954.6	24,358.2	25,954.6	(1,596.4)	24,358.2	27,287.8	24,945.9	27,287.8	(2,341.9)	24,945.9
Operation and Maintenance, Marine Corps	1,716.3	1,700.5	1,716.3	(15.8)	1,700.5	1,775.5	1,767.5	1,775.5	(8.0)	1,767.5
Operation and Maintenance, Air Force	22,812.2	22,709.5	22,812.2	(102.7)	22,709.5	23,545.1	23,269.3	23,545.1	(275.8)	23,269.3
Operation and Maint, Defense Agencies	8,021.6	7,926.0	8,021.6	(95.6)	7,926.0	8,318.9	8,237.9	8,318.9	(81.0)	8,237.9
Office Of The Inspector General	94.7	96.2	95.8	0.4	96.2	96.6	97.6	97.6		97.6
Operation and Maintenance, Army Reserve	861.9	864.3	861.9	2.4	864.3	902.6	902.6	902.6		902.6
Operation and Maintenance, Navy Reserve	980.0	895.7	980.0	(84.3)	895.7	1,017.0	949.9	1,017.0	(67.1)	949.9
Operation & Maint, Marine Corps Reserve	77.4	77.5	77.4	0.1	77.5	79.4	79.4	79.4		79.4
Operation and Maint, Air Force Reserve	1,004.6	981.9	1,004.6	(22.7)	981.9	1,041.3	1,015.4	1,041.3	(25.9)	1,015.4
Operation & Maint, Army National Guard	1,870.2	1,875.5	1,870.2	5.3	1,875.5	1,896.3	1,896.3	1,896.3		1,896.3
Operation & Maint, Air National Guard	2,041.2	1,988.4	2,041.2	(52.8)	1,988.4	2,160.7	2,104.6	2,160.7	(56.1)	2,104.6
Rifle Practice, Army	4.7	4.7	4.7		4.7	5.6	5.6	5.6		5.6
Court of Military Appeals	4.0	4.0	4.0		4.0	4.2	4.2	4.2		4.2
Environmental Restoration, Defense	517.8	517.8	517.8		517.8	519.9	519.9	519.9		519.9
Goodwill Games	14.6	14.6	14.6		14.6					
Humanitarian Assistance	13.0	13.0	13.0		13.0	13.0	13.0	13.0		13.0
DoD Base Closure Account	500.0	300.0	500.0	(200.0)	300.0	500.0	500.0	500.0		500.0
Total Operation & Maintenance	90,197.4	87,781.5	90,198.5	(2,417.0)	87,781.5	94,040.8	90,899.0	94,041.8	(3,142.8)	90,899.0
Army Stock Fund	107.6	97.6	107.6	(10.0)	97.6	141.5	141.5	141.5		141.5
Navy Stock Fund	223.4	201.4	223.4	(22.0)	201.4	232.1	232.1	232.1		232.1
Air Force Stock Fund	339.3	306.3	339.3	(33.0)	306.3	319.6	319.6	319.6		319.6
Defense Stock Fund	104.1	94.1	104.1	(10.0)	94.1	156.3	156.3	156.3		156.3
Total Revolving & Management	774.4	699.4	774.4	(75.0)	699.4	849.5	849.5	849.5		849.5
Total Military Personnel			79,185.3	159.1	79,344.4			81,283.4	178.6	81,462.0
Other Legislation			129.5	(129.5)				69.0	(69.0)	
Section 902-Management Improvements		(373.0)	(286.1)	(86.9)	(373.0)		(503.0)	(433.6)	(69.4)	(503.0)

	FY1990					FY1991				
	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication
Military Construction, Army	737.1	732.6	745.3	(4.5)	740.8	995.3	244.4	995.3	(750.9)	244.4
Military Construction, Navy	1,133.2	1,137.6	1,133.2	4.4	1,137.6	1,211.0	288.2	1,211.0	(922.8)	288.2
Military Construction, Air Force	1,385.5	1,264.9	1,393.3	(120.6)	1,272.7	1,606.3	312.0	1,606.3	(1,294.3)	312.0
Military Construction, Defense Agencies	596.2	572.2	596.2	(24.0)	572.2	951.3	479.5	951.3	(471.9)	479.5
Mil Construction, Army National Guard	114.0	174.6	114.0	60.6	174.6	119.5	119.5	119.5		119.5
Mil Construction, Air National Guard	164.6	216.2	164.6	51.6	216.2	107.2	107.2	107.2		107.2
Military Construction, Army Reserve	76.9	91.5	76.9	14.6	91.5	61.9	61.9	61.9		61.9
Military Construction, Naval Reserve	50.9	50.9	50.9		50.9	53.3	53.3	53.3		53.3
Military Construction, Air Force Reserve	46.2	46.2	46.2		46.2	38.5	38.5	38.5		38.5
NATO Infrastructure	501.9	462.3	501.9	(39.6)	462.3	503.6	503.6	503.6		503.6
Total Military Construction	4,806.5	4,749.0	4,822.5	(57.5)	4,765.0	5,647.9	2,208.1	5,647.9	(3,439.8)	2,208.1
Family Housing, Army	1,438.2	1,432.6	1,437.9	(5.6)	1,432.3	1,617.3	1,559.0	1,617.0	(58.3)	1,558.8
Family Housing, Navy and Marine Corps	752.2	742.4	752.2	(9.8)	742.4	871.1	721.7	871.1	(149.4)	721.7
Family Housing, Air Force	1,015.9	1,072.8	1,015.9	56.9	1,072.8	1,103.0	835.0	1,103.0	(268.0)	835.0
Family Housing, Defense Agencies	21.3	20.4	21.3	(0.9)	20.4	21.8	21.3	21.8	(0.5)	21.3
Homeowners Assistance Fund, Defense	5.1	7.7	5.1	2.6	7.7	5.1	5.1	5.1		5.1
Homeowners Assistance Fund, Defense		(2.6)	2.6	(2.6)				2.3	(2.3)	
Total Family Housing	3,232.7	3,273.3	3,235.0	40.6	3,275.5	3,618.3	3,142.1	3,620.3	(478.5)	3,141.9
Total Trust Funds			27.9		27.9			28.7		28.7
Total Offsetting Receipts			(786.3)		(786.3)			(749.1)		(749.1)
Total DoD Military	213,977.7	213,197.5	295,600.0	(406.2)	295,193.8	228,465.3	203,775.0	310,999.9	(23,594.2)	287,405.8

	FY1990					FY1991				
	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication	Authoriz. Request	Senate Authorized	Revised BA Request	Change to BA Request	Budg Auth Implication
Atomic Energy Defense Activities	9,387.0	9,807.0	9,387.0	420.0	9,807.0	9,687.0		9,687.0	(9,687.0)	
CIA Retirement			154.9		154.9			164.6	(164.6)	164.6
FEMA Salaries and Expenses	20.7	20.7	71.7		71.7			68.9	(68.9)	
FEMA Planning and Assistance	130.8	130.8	244.1		244.1			240.4	(240.4)	
Intelligence Community Staff			24.1	(3.5)	20.6			24.4		24.4
Selective Service System Salaries			26.3		26.3			26.7		26.7
Total Other Defense	151.5	151.5	521.0	(3.5)	517.5			525.0	(309.3)	215.7
Total National Defense	223,516.2	223,156.0	305,508.0	10.3	305,518.3	238,152.3	203,775.0	321,211.9	(33,590.4)	287,621.5

FINDINGS OF THE COMMITTEE'S HEARINGS

The committee and its subcommittees conducted a toal of 44 hearings in review of the President's amended defense authorization request for fiscal years 1990 and 1991. The findings of these hearings are described below.

SUBCOMMITTEE ON STRATEGIC FORCES AND NUCLEAR DETERRENCE

The Subcommittee on Strategic Forces and Nuclear Deterrence held 14 hearings in review of the amended defense budget request for fiscal years 1990 and 1991. In conjunction with full committee hearings on the overall budgetary outlook, program terminations, and the adequacy of planning assumptions underlying the current five-year plan, these hearings clearly demonstrated that defense resources are unlikely to be able to support all of the previously-planned strategic acquisitions. This will result in some slowing in the rate of strategic modernization in future years. The subcommittee recognizes, however, that a great deal of modernization has already been accomplished during the past decade and more. This modernization has taken place in all three elements of the triad, and in strategic warning and command-control systems. In addition, U.S. space launch capabilities have been enhanced by the acquisition of several new classes of space boosters, although the flexibility to move payloads from one booster to another remains limited.

The subcommittee also recognizes that the level of international tensions has decreased somewhat over the preceding several years. The U.S. and Soviet Union are engaged in arms reduction talks involving both strategic offensive and defensive forces. In addition, new talks involving NATO and Warsaw Pact conventional forces have begun. While these encouraging changes in the area of arms control are not grounds for abandoning strategic modernization efforts, they do allow the United States both to sequence major modernization programs so as to reduce the near term budget requirements and to ensure that new weapons systems are adequately tested prior to the allocation of major production funding. The subcommittee has focused major attention on reducing concurrency in development and production in several major programs within its jurisdiction.

A continuing major concern of the subcommittee is the extent of the unfunded liabilities for both cleanup and modernization in the defense programs and facilities of the Department of Energy. For many years, the Department of Energy and its predecessor agencies conducted operations in ways that today are unacceptable on environmental, health, and safety grounds, and invested far too little in plant and facilities modernization. The end result today is a largely worn out physical plant which will require increased funding just to repair, maintain and operate in compliance with existing laws and sound operating procedures. At the same time, the Department of Energy will require additional billions of dollars in order to carry out its ambitious plan to build new, modern production facilities and to conduct a vigorous environmental restoration and remediation program. The Department of Energy's historic budget levels are inadequate to fund all of these requirements.

Unless additional resources are allocated to the Department of Energy's defense programs in subsequent budgets, the subcommittee would be forced to chose between reductions to nuclear weapons programs below the level of the stockpile memorandum, and significant transfers from DoD programs to the Department of Energy defense programs, in order to finance the necessary cleanup and modernization programs.

SUBCOMMITTEE ON CONVENTIONAL FORCES AND ALLIANCE DEFENSE

The Conventional Forces and Alliance Defense Subcommittee has responsibility for reviewing our major conventional defense commitment—the conventional defense of Europe and Northeast Asia. The subcommittee oversees the unified commands assigned those responsibilities. To complement those duties, the subcommittee is responsible for reviewing the development and procurement proposals for the conventional weapon systems required to meet those military requirements.

The subcommittee held detailed hearings this spring on key issues facing our conventional forces. Those hearings brought to light the following highlights and recommendations, which were adopted by the full committee.

MUNITIONS SUSTAINABILITY AND MISSILE PRODUCTION RATES

The committee conducted a comprehensive review of the administration's proposals for the procurement of modern missiles. The committee notes that the administration has proposed deep reductions in missile procurement programs, resulting in increasingly inefficient production lines. The stretchouts also occur for munitions which are in short supply. The committee is concerned that the administration has proposed inadequate funding for advanced conventional munitions.

The combatant commanders and their representatives testified that the military requirement for advanced conventional munitions far outstrips their stocks of war reserves. General Thomas C. Richards, Deputy Commander in Chief of the U.S. European Command, testified that "all the services, Army, Navy, Air Force, Marine Corps, all have shortages, severe shortages of preferred munitions." Vice Admiral Robert Dunn, the former Assistant Chief of Naval Operations (Air Warfare), recently noted that the "CINC's number one concern is the shortage of weapons required to carry out their missions," including the HARM, Maverick, Phoenix and Harpoon missiles.

In many instances, the production rates are being reduced even though inventory levels fall far short of requirements. The following table shows the percentage of inventory objectives currently available and projected to be available if the biennial request for fiscal years 1990 and 1991 is approved as requested.

PERCENTAGE OF INVENTORY VERSUS REQUIREMENT

[Percentage at end of funded delivery period]

	Fiscal year 1989 levels versus requirements	Projected fiscal year 1990 levels versus requirements
TOW 2 (Army)	12	13
MLRS	87	[1] 47
Stinger (Army)	38	43
Hellfire (Army)	67	63
HARM (Navy and Air Force)	50	60
Maverick (Navy and Air Force)	20	30

[1] The Army recently doubled its inventory goals from 400,000 to 800,000. Because the objective doubled, the percentage fill against requirements declined from fiscal year 1989 to fiscal year 1990.

Generally the administration has proposed a one year cut in production rates. Thus, the stretchout this year merely creates an inefficient stretchout in production with the expectation that production rates will rise in future years. The following table compares the fiscal year 1989 procurement level with the requested levels in fiscal year 1990. These stretchouts increase unit costs. The average unit cost increases 19 percent because of the stretchouts.

STRETCHOUTS IN MISSILE PRODUCTION AND IMPACT ON UNIT COSTS

	Fiscal year 1989 actual	Fiscal year 1990 proposed	Percent decrease quantity	Increase in unit cost (percent)
Hellfire (Army)	6,000	3,102	48	25
MLRS Rockets	48,000	24,000	50	21
Stinger (Army)	6,750	2,375	65	35
TOW 2 (Army)	12,000	9,455	21	11
HARM (Navy and Air Force)	2,200	1,488	32	[1] 4

[1] Congressional Budget Office estimate.

In recent years the military departments have established two competing producers for most major missile programs. Competition has substantially lowered cost, yet the stretchouts threaten that competition in several key areas. The stretchouts are so severe that they threaten competition. The following table shows the minimum production rate required for competition, the maximum production rate, and the proposed production rate for fiscal year 1990. The proposed production rate consistently falls *below* the minimum economic production rate, and far short of the maximum efficient production rate. In the case of the Maverick missile, the proposed production rate fails below the minimum sustaining production rate.

PROPOSED PRODUCTION RATES COMPARED TO MINIMUM EFFICIENT PRODUCTION RATES

	Minimum economic rate	Maximum rate	Proposed rate
Hellfire (Army and MC)	6,360	13,500	4,200
MLRS	36,000	96,000	24,000
Stinger	5,100	25,440	2,375
TOW 2 (Army & MC)	21,600	30,000	10,294
HARM (Navy and Air Force)	2,400	3,240	1,488
Maverick (Navy and Air Force)	[1] 3,060	6,000	2,830

[1] Denotes minimum sustaining rate, rather than minimum economic rate.

The committee concluded that these cuts are militarily unwise and economically unsound. The committee believes that the budget, as submitted, does not provide for a balanced force in terms of the "four pillars" of force structure, modernization, readiness, and sustainability. The committee recommended increases in the procurement of five major missile systems as noted elsewhere in the report.

More generally, the committee is troubled by the history of overfacilitization, competition established based on unrealistic requirements, and the inevitable stretchouts that occur when underfunded programs confront facilities designed to support unrealistic inventory goals. The committee is concerned that the "boom and bust" cycle of spending in the last five years has lead the military departments to overfacilitize industry, creating serious inefficiencies today. The acquisition plans have threatened a viable and stable defense industry.

The committee believes the Department of Defense must establish a long-term planning process for guided munitions. That plan should clearly establish stable, long-term procurement programs that incorporate realistic requirements and viable acquisition strategies. The committee expects that long-term plan to become the basis of the Department's budget submission. Because of the serious problems in the individual services' planning and programming processes, the committee believes the Secretary of Defense must strengthen his oversight of the munitions planning, programming and budgeting process.

This plan shall identify by major munition the estimated number of combat days or weapon load-outs planned and programmed for each munition and the rationale for that level. It shall also identify the military and economic rationale for any change in requirements relative to the previous year, explain the specific cost-effectiveness rationale for competition and second-sourcing, and fully identify and discuss the rationale and cost to the government in each case where facilitization in prior years was based on a higher requirement than was actually funded.

The Secretary should deliver the first 10-year munitions plan by April 1, 1990, and by February 1 in subsequent years.

SOLDIER/MARINE ENHANCEMENT PROGRAM

While the Army initiated the activation of several light infantry divisions in the early 1980s, much more should be done to make these light infantry divisions more effective than previous Army or Marine infantry, or the infantry of potential adversaries. The committee believes that the combat potential of the light infantrymen of our Army and Marine Corps could be substantially enhanced with more intensive identification and procurement, as well as development, of lighter, more lethal infantry weapons and improved equipment.

The Army's and Marine Corps' research and development programs disproportionately emphasize more sophisticated combat systems oriented primarily toward new helicopters and combat vehicles. Relatively little funding has been requested for research and development on the lighter, more lethal weapons systems that were indicated as necessary to the Army's light infantry divisions when these divisions were established.

The committee believes that additional resources and emphasis should be directed toward increasing the effectiveness of Army and Marine Corps light infantry. Relatively modest increases in research and development funding and aggressive efforts to identify and procure off-the-shelf items could produce substantially improved weapons and support equipment for our nation's foot soldiers. The committee understands that items of equipment that could prove useful in enhancing the capabilities of foot soldiers of the Army and Marine Corps have already been developed by other countries or are available commercially. The committee intends these funds may be used for "test and evaluation" as well as "research and development."

ARMOR-ANTIARMOR IMPROVEMENTS

The committee continued its evaluation of the Army's progress in redressing the armor-antiarmor balance that had deteriorated through the 1980s. The committee's hearings and investigations found that the Army had substantially increased its commitment during the past year to restoring the qualitative superiority that had characterized U.S. armor and antiarmor forces in previous years.

The committee commends the Army for the emphasis it has placed on armor modernization, and reemphasizes its belief that the Army must sustain a comprehensive set of proposals to address near-term, mid-term and long-term deficiencies. As discussed elsewhere, the committee expresses its reservations over the long-term modernization program outlined by the Army.

CLOSE AIR SUPPORT

The committee continues to place high priority on the need to meet the future demands of the Army in the area of close air support and battlefield air interdiction. The committee noted last year that "the Air Force has devoted insufficient attention to the area of modernizing close air support." The committee notes that the Air Force has tended to resist efforts to emphasize close air support, rather than welcome public attention for this critical air mission.

The committee notes, however, that the close air support/battlefield interdiction mission (CAS/BAI) is substantially more complex and sophisticated than is portrayed publicly. The nature of combat has changed dramatically during the past 30 years. Compared to combat operations just 20 years ago, the Army has substantially more lethal weapons today with much greater ranges (e.g., the multiple launch rocket system), which lessens the need for fire support from air units. Equally important, the battlefield today is substantially more lethal for combat aircraft than in the past, as shown dramatically by the impact of the Stinger missile in Afghanistan.

So too have enemy forces extended the range of their direct and indirect fire weapons. These factors suggest that compared to combat operations at the time the A-10 aircraft was developed, the CAS mission is arguably less important today while the BAI mission is more important. The CAS mission cannot be ignored, however. As General Glenn Otis, the former Commander in Chief of the U.S. Army in Europe testified, it is crucial that the Air Force have weapons in the future that are sufficiently flexible to deal with both types of missions.

Last year the Base Closure Act contained a provision directing the Director of Defense Operational Test and Evaluation to prepare an operational test plan to conduct a competitive fly-off of alternative aircraft for the close air support mission. The test plan was delivered to Congress on March 31, 1989. The provision also directed the Secretary of Defense to conduct an independent assessment of ongoing studies and analyses related to selection of an aircraft for the CAS mission, and to examine the feasibility of transferring the CAS mission from the Air Force to the Army. The latter two reports are due on December 31, 1989.

The committee believes the test plan represents a solid basis for determining the long-term modernization direction for the close air support and battlefield air interdiction missions. Nonetheless, the committee believes the test plan is unnecessarily expensive and lengthy. The committee does not believe it should take five years to conduct a test to determine what aircraft should be selected to modernize the CAS/BAI mission.

Consequently, the committee directs that the Phase I test described in the test concept plan, as submitted by the Director of Operational Test and Evaluation, be executed, but with the following modifications. The test shall include a reasonable number of nighttime trials. The test should include the A–10, upgraded A–10 (with a surrogate used, if necessary), A–16, AV–8B, and F–18 aircraft.

The committee believes that the test plan should include all aircraft types that are or might be involved in close air support. Specifically, the committee notes the increasing role that attack helicopters play in close air support and encourages the Army to evaluate the AH–64 helicopter. The Navy should also insure that sufficient data is collected to evaluate the performance of an A–12 aircraft in the close air support mission. Finally, the committee notes that several years ago the Air Force had developed a program to re-engine the A–10 and suggests that the Air Force again evaluate that alternative.

The committee understands that these modifications will require additional trials in order to gain insights into the significance of altitude, speed, agility in aircraft, and the impact of man-portable air defense missiles on survivability and effectiveness. However, the committee believes the test plan must remain "operational" in character and should be administered by the Army under the direction of the Office of Operational Test and Evaluation. The committee recommends an authorization of $45 million in fiscal year 1990 and $20 million in fiscal year 1991, which may be obligated exclusively for the purpose of implementing the Phase I test as modified by the directed changes.

The committee recognizes the growing importance of battlefield air interdiction in the overall support of the Army. The committee directs that Phase II of the test plan be modified to emphasize battlefield air interdiction. The committee directs the Air Force and the Army to develop jointly an operational test plan for Phase II of the test. The Director of Operational Test and Evaluation shall approve that plan and submit the revised Phase II test plan not later than December 1, 1989.

Finally, the committee notes that the amended budget request contains an interim plan to upgrade 225 existing A-10 aircraft and 146 early model F-16s. While this plan will certainly improve their performance in the CAS/BAI mission, the committee understands that the modified aircraft will not be able to function effectively at night. As General Otis pointed out repeatedly, nighttime operations are essential in future combat. The committee believes that the Air Force program must include the appropriate modifications to permit nighttime operations. With that modification to current plans, the committee believes the upgrade program represents an excellent interim modernization of the CAS/BAI mission.

The Air Force argues it is committed to close air support, yet it is proposing to terminate the only guaranteed tank-killer missile in its inventory—the Maverick missile—after it has purchased only a third of the requirements for the missile. Further, the next generation anti-armor missile, the hypervelocity missile, is not scheduled to enter full scale development until 1995 and will not enter production until the next century. The committee doubts the Air Force would be willing to terminate production of an air-to-air missile with only 30 percent of its requirements met, and wait for five to ten years to develop a replacement.

Therefore, the committee directs the Secretary of the Air Force to evaluate acquisition plans for anit-armor missiles and assess the significance of the projected inventory shortfall for combat operations. That assessment should evaluate the Air Force plan with alternatives that would reduce procurement of F-16 aircraft so that additional funds are available for continuing procurement of Maverick missiles.

SUBCOMMITTEE ON PROJECTION FORCES AND REGIONAL DEFENSE

The Subcommittee on Projection Forces and Regional Defense is responsible for oversight of the military missions of defense of Southwest Asia and defense of other regions where the United States does not have substantial forces deployed in peacetime. The subcommittee also reviews policies and programs for the missions of sea control and maritime force projection in regional areas as well as in NATO and East Asia.

The subcommittee is responsible for those budget elements of research and development and procurement related to these missions, including shipbuilding and conversion (excluding strategic forces), naval aviation (excluding carrier-based aircraft), Marine Corps (excluding tactical aviation), airlift and sealift, and special operations.

A major programmatic issue confronting the subcommittee in the amended budget request for fiscal years 1990 and 1991 is the proposal to conduct a nuclear refueling and modernization (REMOD) of U.S.S. *Enterprise,* a process that will make the ship unavailable for fleet operations for at least 45 months. The Navy estimates the cost will be about $2 billion and proposes to fund this multiyear program like a regular ship overhaul in the Operations and Maintenance account. In this account, the program will be subject to annual budget pressures which might well destabilize an expensive and already lengthy program. By shifting the funding responsibility to the Ship Construction and Conversion account, full funding in a single fiscal year would be possible with attendant contracting and management efficiencies. Also, it would establish clear funding responsibility and accountability for future nuclear aircraft carrier refueling and modernizations. The committee decided to shift these funds in this fashion.

This year the subcommittee reviewed the nature and progress of Marine Corps efforts to integrate special operations capabilities into the existing combat structure of deployed units. In the past several years, the committee has acted to institutionalize a small, tightly focused and specially dedicated joint capability for special operations, but the experience of history demonstrates conclusively that regular combat forces must possess the training and flexibility to support, as necessary and/or appropriate, special operations and low intensity conflict. Working with the U.S. Special Operations Command, the Marine Corps has adapted and developed its special capabilities for amphibious raid and assault to the demands of special operations and the support thereof. The committee will be interested in examining in future years the process for and pace of adaptation and support for special operations and low intensity conflict in other regular combat forces.

Of particular interest to the subcommittee this year was whether a vision of the future was sufficiently clear in naval platform planning to yield focused and rationally executable technology plans. The subcommittee believes that in a period of declining defense budgets, a great need exists for explicit bridging strategies to protect the quality of our people and the quality of our technology—the essential attributes of superiority critical to the success of our deterrent strategy. Consequently, the subcommittee examined the current status of programs for aircraft carriers, submarines, surface combatants and sealift, as well as the status of the technology programs bridging the future for these platforms that provide for the execution of many naval missions.

This year the administration adopted the aircraft carrier retirement plan introduced in the Senate last year, and the force structure has stabilized. The time is appropriate now to stabilize, as well, the modernization of existing carriers and to define future technology needs and opportunities for the rationalization of future construction.

The Navy's attack submarine force has grown to reach the goal of 100 ships, and the initiation last year of the lead ship of the SSN-21 *Seawolf* class ensures force aging can be managed by the rate of new construction. The advanced submarine technology programs initiated by the Defense Advanced Research Projects Agency have promise for providing an excellent technology plan to continue the superiority of the nation's submarine force.

Surface combatant technology planning is advanced, sophisticated and well integrated with building plans for the DDG-51 *Arleigh Burke* class of destroyers. The strategic planning process aggregated technologies into clusters and identified the key technology upon which all others depend. As has been recognized by the Chief of Naval Operations, integrated electric drive is the key technology for future surface combatants and other naval platforms. The most critical need in this area is to rationalize and energize the development program by targeting a ship in the relative near term to receive the system.

Over the past two years, the subcommittee has examined the need for sealift. Repeatedly, the Commanders in Chief of the unified combatant commands have testified as to their need for timely and robust sealift. The needs of the future are likely to be for more sealift and a greater balance in the strategic lift equation than now exists, because the assumptions underlying the planning scenarios are undergoing rapid change. Last year the subcommittee indicated the time had come to raise sealift to a higher priority for resource allocation and required the Navy to provide a report which would help guide thinking on technology for this mission. As a result of this year's examination by the Subcommittee, the time appears to be appropriate and the course seems clear to start providing for that future balance in strategic lift that the nation is likely to need.

SUBCOMMITTEE ON DEFENSE INDUSTRY AND TECHNOLOGY

The Subcommittee on Defense Industry and Technology is responsible for programs that comprise the foundation of our defense acquisition programs—the technology base, the defense industrial base, national defense stockpile policies, technology transfer, certain defense laboratories, and acquisition policy. The subcommittee has jurisdiction over $8 billion in fiscal year 1990 and $8.7 billion in fiscal year 1991.

In its review of the administration's program for fiscal years 1990 and 1991, the subcommittee held detailed hearings on the questions that have arisen about the capability of the United States to sustain and expand upon industrial and technological advances that are essential to our national security. The following are key findings from these hearings.

THE DEFENSE INDUSTRIAL AND TECHNOLOGY BASE

Although the subcommittee believes that the Defense Department's appreciation of the importance of science, technology and productivity continues to improve, the subcommittee finds that the Department's technology and industrial preparedness programs suffer from an absence of clear priorities, lack of long term planning, inadequate funding, and a diversity of goals between the military services and defense agencies. The subcommittee is concerned that unless current trends are reversed, the Department and its underlying industrial support base will not be capable of developing the technologies or producing the weapons needed to meet future threats.

As a percent of the overall defense research budget, the defense technology base budget has undergone a continuous decrease since the late 1960s. Because of this erosion, the United States now is at significantly greater risk in losing the technological superiority that has been the basis for much of our national security policy.

This same tendency to decreased investment in the nation's research and industrial base has resulted in a loss of economic competitiveness in many sectors. The amended fiscal year 1990 defense budget request, while exhibiting significant growth in these areas over the preceding year, again does not properly fund several critical technology and preparedness programs. The request also fails to demonstrate consistency across Service lines and lacks evidence of Department long term planning for research and technology. The committee has increased funding for several important technology base programs that have excellent potential to make a significant impact on the capabilities of future weapon systems.

The subcommittee's review of the first Critical Technologies Plan submitted by the Defense Department indicates that improvement is needed in several areas. Witnesses testifying before the subcommittee have stressed the need for better coordination, more complete planning, and closer ties between government, industry and academia in preparing the Plan. As a result of this testimony, and based on its own review, the committee recommends significant changes in the content of the Critical Technologies Plan both to broaden its base and to provide better insight into plans for developing each technology identified. These changes are set forth in title VIII.

The subcommittee remains concerned over the ability of the Defense Department laboratories to adequately support the technology base and weapons system acquisition programs. Last year the Department endorsed a 1987 Defense Science Board Summer Study that recommended demonstration laboratory management programs be established to evaluate performance gains where laboratory management is given greater flexibility, authority and accountability. Legislation establishing such demonstration programs is included in title VIII.

The defense industrial base continues to require the highest priority attention from the Administration and the Congress. The Defense Department is a major customer for U.S. industry, accounting for over 10 percent of the nation's manufacturing gross national product. Further, the defense industrial base is closely intertwined with the commercial industrial base and is becoming less and less distinguishable from it. As the U.S. commercial base becomes less productive, less competitive, and less viable, so will the defense base.

The Defense Department's report *Bolstering Industrial Competitiveness* clearly states the need to develop an efficient means to gather and analyze data and information on all segments of the defense and commercial industry. Because of today's international nature of the industry and commerce, this data gathering must be performed on a world-wide basis. The committee therefore urges the Secretary of Defense to consolidate existing industrial base analysis programs under the Defense Industrial Base Office established by the National Defense Authorization Act for Fiscal Year 1989.

The subcommittee also continues to have a strong interest in manufacturing technology (MANTECH) and concurrent engineering. The subcommittee received testimony from the Chairman of the Defense Manufacturing Board in which graphic examples were presented showing how our competitors are using manufacturing technology investments to dramatically reduce costs. The committee believes that the funding included in the Defense Department amended budget request for both of these activities is insufficient and has taken steps to correct these deficiencies. The committee continues to urge the Department to establish a cohesive MANTECH Program across all Service and Agency lines and the Office of the Secretary of Defense to provide top level "corporate" policy and decisionmaking.

In recent years, the subcommittee has been particularly concerned about the Department's inattention to the impact of contract financing policies (such as progress payment rates, return on investment, and special tooling costs) on the health of the defense industrial and technology base. In section 801 of the National Defense Authorization Act for Fiscal Year 1989, Congress required the Secretary of Defense, in conjunction with the preparation of the Five Year Defense Program, to develop and keep current a plan to ensure that the Department's contract financing policies are structured to meet the long-term needs of the Department for industrial resources and technological innovation. Thus far, the Department has failed to comply with the requirement to prepare and develop such a plan. The committee has received assurances that the work necessary to prepare such a plan is now underway and that a plan will be completed in the near future. The committee reaffirms its belief that the development of such a plan is essential and looks forward to reviewing the Department's plan.

INDUSTRIAL COMPETITIVENESS AND DEFENSE TRADE POLICIES

The National Defense Authorization Act for Fiscal Year 1989 established a new framework for the role of defense trade and cooperation in strengthening the competitiveness of our industrial and technology base. Unfortunately, implementation by the executive branch of last year's statutory requirements has been slow and uncertain, especially for those matters that require the coordination of two or more Federal agencies. For example, the executive branch has made almost no progress toward establishing a policy and initiating international negotiations on limiting the adverse effects of offset arrangements in defense exports.

In 1988, the subcommittee expressed its concern that the U.S. Government needs to be sensitive to U.S. economic interests in promoting defense trade and cooperation with our allies. The subcommittee continues to believe that defense trade and cooperation stimulate the competitiveness of U.S. industry, as long as their commercial implications are properly considered. Although the new administration appears to recognize this fact-of-life, it has not yet manifested it in actual policy, organizational, and personnel decisions.

ACQUISITION POLICIES AND MANAGEMENT

The fundamental purpose of the acquisition system is to provide our men and women in uniform with quality equipment and services on time and within budget. Confidence in the ability of the system to fulfill that purpose has been repeatedly shaken as a result of cost overruns, delays, defective products, fraud, and difficulties in attracting and retaining quality people to the acquisition workforce. The unfolding "Ill Wind" scandal is but the latest indication that the acquisition system faces serious and persistent problems.

In 1986, the Packard Commission, which described the system as "fundamentally ill," prescribed a series of reforms to streamline the acquisition process. In this year's hearings, the subcommittee received disturbing testimony from the General Accounting Office and the DoD Inspector General about glaring deficiencies in the Department's implementation of the Packard Commission reforms and recent legislation. Little progress has been made in streamlining the acquisition process, making greater use of commercial products (with reduced reliance on rigid military specifications), and improving the responsiveness of the Department's regulatory reform process. The committee recommends a number of steps, which are set forth in title VIII of the bill, to address these problems.

Witnesses before the subcommittee consistently emphasized the need to address problems of the acquisition workforce. James R. Woolsey, a former Under Secretary of the Navy and member of the Packard Commission, noted that "the single most important set of reforms the Packard Commission recommended and the one on which all the others depend is * * * personnel reform, being able to attract and retain able people with backgrounds in defense acquisition into defense both as political appointees and as career civilians."

Derek Vander Schaaf, the Deputy Inspector General of the Department of Defense, noted the direct connection between personnel reform and fraud, waste, and abuse in the acquisition process:

> Human errors of omission and commission are far more prevalent when the personnel management system is too cumbersome and inflexible, when pay is not competitive with rival economic sectors and organizations, when spheres of authority are poorly defined and there is duplicative organizational effort, when training is not adequately emphasized, when recruitment and retention of high quality personnel is difficult, and when morale is not optimum. Audits and inspections have confirmed that these kinds of workforce problems exist to various degrees in a large number of DoD organizations, especially among those performing such crucial acquisition tasks as contract administration, quality assurance, property administration, and contracting.

The committee's recommendations for acquisition workforce enhancements are set forth in title VIII of the bill.

Subcommittee on Readiness, Sustainability and Support

The Subcommittee on Readiness, Sustainability and Support has a broad charter to overse two key measures of our military capability—the ability to go to war today and the ability to sustain deployed forces as required during conflict. The subcommittee is responsible for reviewing those elements of the annual defense authorization request which are associated with the operation and maintenance of our military forces and with those items of procurement particularly related to readiness and sustainability, such as conventional ammunition and spare parts. The subcommittee also oversees the operation of the revolving and management funds and reviews the budget request for military construction and family housing.

The subcommittee began its review of the amended defense budget request for fiscal years 1990 and 1991 with three hearings on the recommendations of the Defense Secretary's Commission on Base Realignments and Closures. The subcommittee then received testimony from representatives of four of the unified combatant commanders; from the senior logistics commanders in the Army, Navy and Air Force; from Army and Air Force officials responsible for managing ammunition programs; from Office of the Secretary of Defense and General Services Administration officials on Department of Defense military construction programs overseas and in the National Capitol Region; and from Office of the Secretary of Defense and service officials on Department of Defense environmental programs. The subcommittee also joined with the Subcommittee on Conventional Forces and Alliance Defense and the Subcommittee on Manpower and Personnel in a hearing to review alternatives for substituting reserve forces for active duty forces, particularly in the Air Force, and to consider opportunities for the rapid deployment of forward deployed of the recent achievements and remaining problems in the areas of readiness, sustainability and support, and how the amended defense budget request addresses these problems.

Last year in the committee's report on the National Defense Authorization Act for Fiscal Year 1989, the subcommittee noted that the November 1987 Deficit Reduction Agreement between the President and the Congress resulted in deep reductions in the operation and maintenance accounts for fiscal year 1988 which were having a major impact throughout the force. The subcommittee also noted that in the defense budget request for fiscal year 1989, the military services had made a conscious decision to protect the near-term readiness of their forces at the expense of long-term sustainability.

This year the subcommittee found that the overall level of operation and maintenance funding in fiscal year 1990 will restore some of the buying power from the reduced fiscal year 1988 level. The training and opeating level throughout the military forces remain constant, and readiness continues to be high. However, the current levels of peacetime operations and readiness continue to come at the expense of investments in long-term sustainability (ammunition and spare parts) and in the maintenance of the infrastructure (depot maintenance and facilities maintenance and modernization) essential to supporting our military forces.

READINESS OF THE FORCE REMAINS HIGH

According to the witnesses testifying before the committee and the Readiness, Sustainability and Support Subcommittee, the day-to-day readiness of most of our military forces remains high. However, Major General H.C. Stackpole, III, USMC, the Director for Plans and Policy of the United States Atlantic Command, cautioned the committee that:

> We may be seeing the first signs that equipment and supply readiness have peaked.

Witnesses of the unified combatant commands continue to cite the problems in the readiness posture of the Army's combat and combat service support units noted by the subcommittee last year. Major General Christian Patte, USA, the Director of Logistics and Security Assistance of the United States Central Command, noted before the subcommittee:

> Readiness problems in Army Reserve Component (RC) Combat Support (CS)/Combat Service Support (CSS) units continue to limit combat effectiveness of our forces * * * Overall, the readiness of CS/CSS units has improved but the RC units still have the preponderance of problems and since they form 75 percent of our unit support structure, this deficiency limits full accomplishment of our mission.

Major General Stackpole told the Committee that for the Atlantic Command "in spite of aggressive cross-leveling and redistribution, combat support and combat service support units have serious shortfalls and lack essential theater stocks and medical equipment."

SUSTAINABILITY CONCERNS CONTINUE

For the last several years, funding for sustainability—the staying power of our military forces once they are deployed—has been a major concern of the unified combatant commanders. The subcommittee found that these concerns are continuing, and are even increasing with the propsects of reduced growth in the outyears of the Five Year Defense Plan.

In general, the sustainability posture of our military forces has improved in recent years, but this improvement reflects deliveries of equipment funded largely in prior years. Shortages of war reserve stocks, particularly in the area of threat-oriented munitions, remains. General Patte told the subcommittee:

> Munitions sustainability for Level-of-Effort (LOE) munitions continues to be a genuine concern. Shortfalls are primarily in the modernized direct-fire and artillery munitions supporting ground forces. In the area of threat-oriented (TO) munitions, the on-hand aggregate posture stands at 53 percent of our requirement.

War reserve spare parts sustainability is another area of concern, particularly for the future. Major General Royal N. Moore, Jr., USMC, the Director of Operations of the United States Pacific Command, told the subcommittee that:

> Since 1980 we have made a steady dollar investment in the area of replacement spares. The result has been a quantitative improvement in the supply on hand * * * Our projection is that the fiscal years 1990/91 budget will prevent future improvement in our sustainability posture.

> And as modern equipment is fielded for which the full range and depot of spare parts is not funded, sustainability problems will increase.

In addition to the testimony from the unified combat commands, the subcommittee received other testimony suggesting that sustainability programs are being cut back. For example, funding for the Army's ammunition programs in fiscal year 1990 is the lowest in constant dollars since fiscal year 1980, and funding in fiscal year 1991 is below the fiscal year 1980 level. This continued decline in funding is having a major impact on our ammunition production base, both government-owned and commercial facilities. Army officials testified that they are currently planning to deactivate three active Army ammunition facilities over the next two years.

SHORTFALLS IN INFRASTRUCTURE INVESTMENT: GROWING MAINTENANCE BACKLOGS

The subcommittee continues to be concerned about shortfalls in Department of Defense investments in two critical areas of infrastructure support: depot maintenance and facilities maintenance and modernization.

The backlogs of weapons and equipment overdue for depot maintenance have grown dramatically in the military services in recent years. Unfortunately, this growth is projected to continue over the two years of the amended defense budget request for fiscal years 1990 and 1991. From fiscal year 1989 to fiscal year 1990, the total depot maintenance backlog in the Department of Defense increases by 50 percent, and then increases another 8 percent in fiscal year 1991.

These large and growing depot maintenance backlogs will begin to have an impact on equipment availability and mission capable rates throughout the Department of Defense in the near future. For this reason, the committee recommends increases above the amended budget request maintenance in the Army, Navy and Air Force.

Department of Defense witnesses continue to emphasize their commitment to maintaining our investment in new facilities and providing our military and civilian personnel in the Department of Defense with the living and working environment which they deserve. However, the subcommittee is growing increasingly concerned that the Department of Defense level of investment in both new construction and in maintenance and repair of the current real proterty inventory will not allow the Department of Defense to meet these objectives in the coming years.

The overall level of military construction and family housing operations in the amended defense budget request for fiscal year 1990 represents a 12 percent reduction from the fiscal year 1989 level. While this funding level is programmed to be restored in fiscal year 1991, the overall federal budget climate raises questions about whether this recovery will take place.

Funding for real property maintenance activities continues to fall further behind annual requirements in all of the military services. The backlog of maintenance and repair of real property for the whole Department of Defense increases by 25 percent from fiscal year 1989 to fiscal year 1990, and increases by another 17 percent in fiscal year 1991. From fiscal year 1988 to fiscal year 1991, the backlog grows by 80 percent. The largest increases in the backlog over this period are in the Army (from $1.6 to $3.4 billion, a 110 percent increase) and the Navy (from $1.3 to $2.1 billion, a 69 percent increase).

In an attempt to slow this growth in the backlog of maintenance and repair of Department of Defense facilities, the committee recommends reductions to new construction programs outside of the United States which may not be needed in light of ongoing discussions concerning United States deployments overseas. The savings from these reductions have been applied to maintenance and repair of existing facilities.

ENVIRONMENTAL PROGRAMS IN THE DEPARTMENT OF DEFENSE

In recent years, an increasing amount of attention has been focused on the issue of cleanup of hazardous waste sites at Department of Defense facilities. Testimony before the subcommittee indicates that the Department of Defense is now spending over $1 billion per year to clean up hazardous wastes at current and former Department of Defense facilities and to bring Department of Defense activities in compliance with environmental laws and regulations.

Cleanup costs of hazardous waste sites have been estimated as high as $15 billion over the next 15–20 years. These figures may be conservative because of the scientific and technical uncertainties involved in many of the proposed cleanup activities. Future costs of bringing all Department of Defense activities in compliance with existing environmental laws and regulations are also uncertain.

Hazardous waste cleanup and environmental compliance will require significant investment by the Department of Defense and the military services over the Five Year Defense Plan and beyond. In order for the committee and the Congress to better understand Department of Defense environmental priorities, the committee requires the Secretary of Defense to submit a master plan for environmental activities within the Department of Defense to the Congress by December 31, 1990. This master plan will outline Department of Defense environmental requirements and priorities, including the costs and schedule to clean up contaminated sites at Department of Defense facilities within the currently projected level of funds available over the next decade.

SUBCOMMITTEE ON MANPOWER AND PERSONNEL

The Subcommittee on Manpower and Personnel conducted four hearings this year in preparation for its review of the manpower portion of the amended defense budget request for fiscal years 1990 and 1991. In addition, the subcommittee met in a joint hearing with the Subcommittee on Readiness, Sustainability and Support and the Subcommittee on Conventional Forces and Alliance Defense to address alternatives for substituting reserve forces for active air forces, with emphasis on the rapid reinforcement of Europe.

The basic philosophy of the subcommittee in addressing the amended budget request was to support the difficult choices the Department of Defense had to make in pairing down its original budget request. The subcommittee focused on three broad areas: (1) the operation and effectiveness of the Total Force policy in the Department of Defense; (2) the recruiting, retention, and compensation programs required by the active and reserve forces to sustain a quality manpower inventory; and (3) the operatin and effectiveness of the military health care delivery system.

The basic philosophy the subcommittee followed is reflected in the committee's recommendations which were designed to preserve and enhance, where appropriate, the gains made in these areas. Specifically, the committee: (1) supported, with minor modification, the active duty and reserve end strengths requested by the Department of Defense; (2) support the requested 3.6 percent military pay raise; (3) provided a substantial enhancement to aviator compensation to correct aviator retention problems; (4) provided travel and other targeted recruiting and retention enhancements for the active and reserve forces, and (5) provided targeted recruiting and retention incentives for health professionals.

There is no question that the investments Congress has made in the manpower account over the last decade have paid off in a quality force. For example, last year, 93 percent of non-prior-service recruits were high school graduates and 95 percent scored average or better on the Armed Services Vocational Aptitude Battery (ASVAB) entrance examination. This compares to comparable percentages in 1980 of 68 percent and 65 percent, respectively.

The committee is mindful of the declining youth population and the challenge it poses to recruiting in the coming year. The committee will continue to monitor carefully the recruiting efforts of the Military Services to ensure that quality is not sacrificed for quantity. The committee expects the Department of Defense to define, in recruiting terms, standards to support its announced policy of choosing a smaller quality force over one that is larger but of lower quality.

Finally, the committee is also mindful of the difficulties the Department of Defense has experienced in providing adequate medical care to beneficiaries of the military health care system, and the serious shortfalls in combat support and combat service support manning in the Army Reserve. As indicated further in this report, the committee expects to work with the Department of Defense to correct these problems on a priority basis.

TITLE I—PROCUREMENT

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATION

The recommendations of the committee for the procurement of various defense weapons and equipment appear in the following pages.

EXPLANATION OF TABLES

The tables in this title display items requested by the administration for fiscal years 1990 and 1991 in which the committee either increased or decreased the requested amounts. Items that are not displayed have been approved by the committee in the fiscal year 1990 and fiscal year 1991 amounts requested in the Department of Defense's amendment budget justification documents. As in the past, the administration may not exceed the amounts approved by the committee (as set forth in the tables or, if unchanged from the administration's request, as set forth in the Defense Department's budget justification documents), without an appropriate reprogramming action in accordance with established procedures.

UNDISTRIBUTED REDUCTIONS

Any undistributed reductions shown in these tables are made without prejudice to any particular programs, but are not to apply to any programs for which the committee has made recommendations for programmatic or funding increases, except as noted in the text.

MAJOR PROGRAM TERMINATIONS

The committee understands Secretary Cheney's decision to terminate marginal programs as a solution to reduced budgets rather than systematically stretching out production rates on most weapon systems. Secretary Cheney recommended termination of the following major weapon systems:

V-22 tilt rotor
F-14D (new manufacture aircraft only)
F-15E (after fiscal year 1991)
AH-64 helicopter (after fiscal year 1991)
Army Helicopter Improvement Program
M88A2 recovery vehicle
SSN-688 submarine (the final ship in the class)
Phoenix missile

These program terminations represent 30 percent of the total reductions achieved in the amended budget submission. If combined with other program terminations in the budget, over 40 percent of the reductions came from terminations, rather than stretchouts and deferrals.

For years the Department has developed five year defense plans which substantially exceeded the resources the administration and the Congress were prepared to provide. The General Accounting Office noted that during the past eight years, over $500 billion in the Department's five year plans has been deleted.

During the past five years, the primary approach to tighter budgets was to stretchout the procurement of weapon systems. As a consequence, almost every major weapon system is currently being produced at extremly inefficient production rates. In a study conducted for the committee, the Congressional Budget Office found that during the past five years, weapon systems have been produced, on the average, at just 50 percent of efficient production capacity. A fourth of the major acquisition programs were manufactured at a rate *below the minimum economic rate* for those systems. Even this year, despite Secretary Cheney's efforts, over 29 major weapon systems were stretched out to the point that they triggered special "stretchout impact statements" as required by section 117 of the National Defense Authorization Act for Fiscal Year 1989.

In this context, the committee can appreciate the Secretary's decision to terminate a small number of major weapon systems rather than stretchout dozens of other programs. The committee shares the Department's view that these terminations represent a loss in military capability. The committee also believes that reductions, though very difficult, are necessary if the Department's long term plans are to be reconciled with realistic future budget projections.

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	ARMY PROCUREMENT CHANGES												
	AIRCRAFT PROCUREMENT												
9	AH-64 ATTACK HELICOPTER (APACHE) (MYP)	66	752,056		(50,300)	66	701,756	66	785,771			66	785,771
11	UH-60 BLACKHAWK (MYP)	61	174,284		(71,600)	61	102,684	61	206,826		(98,500)	61	108,326
12	UH-60 ADVANCE PROCUREMENT (CY)		180,312		(80,100)		100,212		173,731				173,731
13	MH-60K (SOF AIRCRAFT)	11	71,300		(20,000)	11	51,300	11	68,500			11	68,500
20	CH-47 CARGO HELICOPTER (MODS) (MYP)		200,177				200,177		194,894		(190,400)		4,494
23	UH-1 MODS		9,602		(1,800)		7,802		23,952		(6,700)		17,252
25a	AHIP PRIOR YEAR SAVINGS				(96,000)		(96,000)						
27	AIRBORNE AVIONICS				4,800		4,800				7,800		7,800
33	SPARES AND REPAIR PARTS		553,423		127,800		681,223		538,265		(20,100)		518,165
36	AVIONICS SUPPORT EQUIPMENT		30,786				30,786		32,093		(22,100)		9,993
37	COMMON GROUND EQUIPMENT		46,325		(1,000)		45,325		75,822		(800)		75,022
	UNDISTRIBUTED REDUCTION				(43,000)		(43,000)						
	MODERNIZATION				31,600		31,600				34,700		34,700
	TOTAL AIRCRAFT PROCUREMENT ARMY				(199,600)						(296,100)		
	MISSILE PROCUREMENT												
4	ADS HVY MSL SYSTEM	190	238,871	(190)	(163,871)		75,000	263	232,682	(263)	(232,682)		
10	STINGER(MYP)	2,375	117,545	2,000	89,000	4,375	206,545	7,203	258,800			7,203	258,800
14	LASER HELLFIRE SYSTEM	3,102	138,326	2,800	93,500	5,902	231,826	3,002	137,941	2,800	94,700	5,802	232,641
16	TOW 2 (MYP)	9,455	114,710	4,300	51,100	13,755	165,810	13,284	168,700			13,284	168,700
17	MULTIPLE LAUNCH ROCKET SYSTEM (MYP)	24,000	311,374	24,000	128,800	48,000	440,174	24,000	310,070	24,000	132,800	48,000	442,870
17a	MLRS LAUNCHER SAVINGS				(17,000)		(17,000)						
19	ARMY TACTICAL MISSILE SYS (ATACMS)	152	87,273	124	46,000	276	133,273	452	194,958			452	194,958
	TOTAL MISSILE PROCUREMENT ARMY				227,529						(5,182)		

P-1		Bush Revised		-----Senate------		-----Senate------		Bush Revised		-----Senate------		-----Senate------	
		FY1990 Request		Change to Request		Authorization		FY1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	WEAPONS & TRACKED COMBAT VEHICLES												
1	BRADLEY FIGHTING VEHICLE FAMILY (MYP)	600	576,417		(27,000)	600	549,417	600	648,299			600	648,299
6	RECOVERY VEHICLE SERIES (MYP)				15,000		15,000						
6a	RECOVERY VEHICLE PRIOR YEAR SAVINGS				(124,800)		(124,800)						
9	M1 ABRAMS TANK SERIES (MYP)	448	1,033,735			448	1,033,735	261	811,311	84	260,400	345	1,071,711
10	M1 ADVANCE PROCUREMENT (CY)		245,000		31,600		276,600		368,300		40,100		408,400
20	PRODUCTION BASE SUPPORT (TCV-WTCV)		55,442		(32,900)		22,542		59,618				59,618
26	GRENADE LAUNCHER, AUTO, 40MM, MK19-3	1,476	19,736			1,476	19,736	1,418	19,902	(1,418)	(19,902)		
30	SNIPER WEAPON SYSTEM	1,010	3,770	(398)	(1,500)	612	2,270						
31	PERSONAL DEFENSE WEAPON, 9MM	34,696	7,539			34,696	7,539	35,101	7,750	(2,012)	(400)	33,089	7,350
	MODERNIZATION				53,200		53,200				58,300		58,300
	TOTAL PROCUREMENT OF W&TCV,ARMY				(86,400)						338,498		

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	AMMUNITION												
4	CTG, 5.56MM, ALL TYPES		41,747				41,747		56,906		(8,400)		48,506
17	CTG, .50 CAL, BALL, M33	1,453	1,415			1,453	1,415	2,041	1,955	(417)	(400)	1,624	1,555
22	CTG, 20MM, MPT-SD, M940	548	9,431		10,000	548	19,431	530	8,468	(156)	(2,500)	374	5,968
23	CTG, 25MM, HEI-T, M792							491	9,575	(173)	(3,400)	318	6,175
26	CTG, 25MM, APFSDS-T, M919	102	9,075	11	1,000	113	10,075	529	28,302	(128)	(6,900)	401	21,402
29	CTG, 40MM HEDP M430			1,375	15,000	1,375	15,000						
50	CTG, TANK, 35MM, SUBCAL PRAC, M968	192	15,234	(157)	(12,400)	35	2,834	139	11,359			139	11,359
51	CTG, TANK, 105MM, TP-T, M490A1	164	22,869	(107)	(15,000)	57	7,869	112	15,672			112	15,672
52	CTG, TANK, 105MM, DS-TP, M724A1	353	55,940	(113)	(16,500)	240	39,440	275	43,669			275	43,669
56	CLASSIFIED PROJECT	[ ]	[ ]		[9,900]								
61	CTG, TANK, 120MM, TP-T, M831	30	28,500	22	20,400	52	48,900	34	32,602			34	32,602
62	CTG, TANK, 120MM, TPCSDS-T, M865	91	63,519	36	21,900	127	85,419	91	61,669			91	61,669
65	CTG, ARTILLERY, 105MM, HERA, M913	27	15,876	(13)	(7,900)	14	7,976	43	20,986			43	20,986
75	PROJ, ARTY, 155MM, BASEBURNER M864	240	178,732	(76)	(56,500)	164	122,232	120	89,663	41	31,000	161	120,663
79	PROP CHG, 155MM, GREEN BAG, M3	220	11,685	540	28,700	760	40,385						
80	PROP CHG, 155MM, RED BAG, M203	203	106,260	(122)	(64,000)	81	42,260	129	67,583		59,000	129	126,583
81	PROP CHG, 155MM, RED BAG, M119			314	33,000	314	33,000						
87	FUZE, ARTILLERY, ELEC TIME, M762	417	47,364			417	47,364	324	28,817		10,000	324	38,817
91	MINE, VOLCANO, AT/AP, M87	47	80,950	(18)	(31,000)	29	49,950	36	57,370	(18)	(28,700)	18	28,670
92	MINE, MICLIC, ROCKET MOTOR, MK22	1,781	6,882	(890)	(3,500)	891	3,382	1,549	5,978	(775)	(3,000)	774	2,978
93	MINE, MICLIC, LINE CHARGE, M58	937	9,875	(468)	(5,000)	469	4,875	747	7,705	(373)	(3,800)	374	3,905
94	MINE, MOPMS, AT/AP, M131	3,327	40,621	(1,411)	(17,200)	1,916	23,421	732	8,787	(366)	(4,400)	366	4,387
97	AT-4 MULTI-PURPOSE WEAPON	66	56,031	(25)	(21,600)	41	34,431			39	32,000	39	32,000
98	AT-4 MULTI PURPOSE WEAPON TRAINER	5,859	3,890	(5,859)	(3,400)		490	5,834	3,887			5,834	3,887
107	DEMOLITION MUNITIONS, ALL TYPES			6	11,800	6	11,800		10,486		(3,200)		7,286
110	GRENADES, ALL TYPES		12,612		7,300		19,912		2,972		(300)		2,672
112	SIGNALS, ALL TYPES		5,018		(1,200)		3,818		8,570		(3,200)		5,370
115a	MOUT FUZE			150	18,000	150	18,000						
116	ITEMS LESS THAN $2 MILLION		7,072		(200)		6,872		6,301				6,301
999	CLASSIFIED PROGRAMS		229,695		9,900		239,595						
	INDUSTRIAL PREPAREDNESS				71,000		71,000				75,000		75,000
					--------						---------		
	TOTAL AMMUNITION, ARMY				(7,400)						138,800		

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	OTHER PROCUREMENT ARMY												
1	TACTICAL TRAILERS/DOLLY SETS		19,265		(4,100)		15,165		15,299		(8,200)		7,099
3	SEMITRAILER FB BB/CONT TRANS 22 1/2 T							856	15,361	(115)	(2,000)	741	13,361
9	SEMITRAILER, VAN, ASL, 10T									(56)	(2,500)	(56)	(2,500)
11	SMALL UNIT SUPPORT VEHICLE (SUSV)	192	28,351	(77)	(11,400)	115	16,951	194	29,235			194	29,235
13	FAMILY OF MEDIUM TACTICAL VEH (MYP)							644	77,994	(82)	(8,000)	562	69,994
15	TRUCK, 10T, 8X8, ABT	46	7,468	(46)	(7,468)			23	3,469	(23)	(3,469)		
16	FAMILY OF HEAVY TACTICAL VEH (MYP)	112	43,297	(62)	(24,000)	50	19,297	789	236,460	(208)	(62,300)	581	174,160
17	TRUCK, TRACTOR, LINE HAUL, M915A1	123	9,728	(96)	(7,600)	27	2,128						
26	SPARES AND REPAIR PARTS		56,854		(16,200)		40,654		84,065		(19,700)		64,365
33	MOB SUBSCRIBER EQUIP		984,719		(100,000)		884,719		68,596				68,596
34	SINCGARS FAMILY		290,728		(169,100)		121,628		264,519				264,519
41	SMALL UNIT TRANSCEIVER	2,445	3,972	(1,690)	(2,800)	755	1,172						
102	MOD IN-SVC EQ (INT SPT) TIARA		6,069		(3,900)		2,169		7,054				7,054
107	GENERAL DEFENSE INTELLIGENCE PROGRAM	[ ]	[ ]		[-1,100]			[ ]	[ ]		[-500]		
114	ARMY DATA DISTRIBUTION SYSTEM-ADDS		48,817		(48,817)				223,254				223,254
129	FORWARD ENTRY DEVICE		24,558		(13,200)		11,358		21,195				21,195
150	COMPUTER/INDICATOR, CP-696/PD	1,236	6,719	(325)	(1,800)	911	4,919	961	6,935	(266)	(1,800)	695	5,135
155	NAVSTAR USER EQUIPMENT		27,021				27,021		32,815		(8,700)		24,115
157	NIGHT VISION GOGGLES		45,286		(13,400)		31,886		45,473		(10,700)		34,773
159	IMAGERY PROCESSING SYSTEM	[ ]	[ ]		[-11,400]			[ ]	[ ]				
160	NIGHT VISION SIGHT INDIV WPN AN/PVS-4	5,852	14,920	(4,883)	(12,400)	969	2,520	5,725	14,649			5,725	14,649
161	RADIAC SET AN/VDR-2	7,410	8,698			7,410	8,698	9,392	10,898	(2,322)	(2,700)	7,070	8,198
163	SMALL AEROSTAT SURVEILLANCE SYSTEM		3,483		(3,483)								
173	SPARES AND REPAIR PARTS		316,319		(1,100)		315,219		311,515				311,515
179	DECONTAMINATE APP PWR DR LT WT M17							550	8,610	(422)	(6,600)	128	2,010
999	CLASSIFIED PROGRAMS		143,044		(12,500)		130,544		124,326		(500)		123,826
180	MASK, PROTECTIVE, NBC		56,030		(10,300)		45,730		60,585		(39,800)		20,785
180a	IMPROVED DRINKING SYSTEM				1,000		1,000						
181	MASK, ACFT	750	9,878	(54)	(700)	696	9,178	17,500	27,532			17,500	27,532
182	CHEMICAL AGENT MONITOR	3,307	19,757	(711)	(4,300)	2,596	15,457	3,273	20,387	(1,666)	(10,300)	1,607	10,087
183	SIMP COLL PROT EQUIP M20	928	6,201	(296)	(2,000)	632	4,201	380	3,661	(127)	(1,200)	253	2,461

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate----- Change to Request		-----Senate----- Authorization		Bush Revised FY1991 Request		-----Senate----- Change to Request		-----Senate----- Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
207	LAUNDRY UNIT/TRL MTD							150	11,975	(31)	(2,500)	119	9,475
213	TANK ASSEMBLY FAB COLLAPSIBLE POL 10000G	119	1,106	(42)	(400)	77	706	327	3,054	(80)	(700)	247	2,354
214	TANK ASSY, FAB COLLAPS, 20,000 GAL POL							537	3,265	(326)	(1,900)	211	1,365
215	TANK/PUMP UNIT LIQ DISP F/TRK MOUNTING	332	2,963	(146)	(1,300)	186	1,663						
216	LABORATORY, PETROLEUM, SEMI-TRLR MTD	2	1,470			2	1,470	6	3,775	(2)	(1,300)	4	2,475
217	PUMP ASSY LIQ GAS WHL 4 IN OUT 350 GPM							764	7,541	(398)	(3,900)	366	3,641
220	WATER PURIF UNIT REV OS 3000 GPH	37	14,309	(15)	(5,800)	22	8,509	40	15,942			40	15,942
223	TANK FABRIC COLL WTR 3000 GAL (ONION)	669	1,082	(275)	(500)	394	582	1,529	2,459	(488)	(800)	1,041	1,659
224	WATER QUALITY ANALYSIS SET PURIF							100	989	(95)	(900)	5	89
225	ITEMS LESS THAN $2.0M (WATER EQ)		3,042		(1,000)		2,042		5,606		(1,400)		4,206
237	TUG INLAND AND COASTAL WATERWAYS			1	7,500	1	7,500						
245	TRUCK, FORK LIFT, DE, PT, RT, 6000 LB	281	21,321	(240)	(18,200)	41	3,121	259	20,034	(82)	(6,300)	177	13,734
246	TRUCK, FORK LIFT, DE, PT, RT, 4000 LB	302	14,115	(81)	(3,800)	221	10,315	247	11,752	(220)	(10,400)	27	1,352
249	SPARES AND REPAIR PARTS		30,161		(16,600)		13,561		31,793		(16,400)		15,393
	ASSET CAPITALIZATION PROGRAM				58,900		58,900				64,500		64,500
	MODERNIZATION				59,100		59,100				59,100		59,100
	TOTAL OTHER PROCUREMENT ARMY				(391,668)						(111,369)		

FY1991 ARMY PROGRAM DEFERRALS

P-1 LINE	AMMUNITION	Bush Revised FY1991 Request Quantity	Bush Revised FY1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
2	PROJ, 155MM, NUCLEAR, M785	[ ]	[ ]				--
3	PROJ, 155MM, BINARY CHEMICAL, M687	[ ]	[ ]				--
999	CLASSIFIED PROGRAMS		337,588				242,088
	TOTAL AMMUNITION DEFERRED				(95,500)		

AH-64 HELICOPTERS

The amended budget request includes $788.6 million to procure 66 AH-64 helicopters in fiscal year 1990. The committee notes that $50.3 million of funds appropriated in excess of authorized levels in fiscal year 1989 remains available for obligation. Therefore, the committee recommends an authorization of $738.3 million for fiscal year 1990. The committee recommends the requested level for fiscal year 1991.

MH-60K HELICOPTER

The administration requested $71.3 million for procurement of 11 MH-60K helicopters for special operations forces. Additional information indicates the same number of aircraft can be procured for $51.3 million.

The committee recommends authorization of $51.3 million for procurement of 11 helicopters, a reduction of $20 million from the request.

COMMAND AND CONTROL CONSOLES FOR ARMY HELICOPTERS

During the Grenada operation, the Army found that its radios were not interoperable with Marine Corps and Navy radios. As a near-term solution, the Army decided to install command and control consoles in Army helicopters. These consoles have all the relevant radio systems operated by Army, Navy, Marine Corps and Air Force combat networks. The Army intended to procure 130 consoles and install the appropriate installation features on 308 helicopters to insure interoperability in future joint operations.

The committee understands that this program was not funded in fiscal year 1990 because of an oversight, and recommends an authorization of $4.8 million for ASC-15B consoles and installation in fiscal year 1990, and $7.8 million in fiscal year 1991.

AIRCRAFT SPARES AND REPAIR PARTS

The committee recommends an increase of $130 million to the Army's budget request in fiscal year 1990 for aircraft spares and repair parts. This increase is necessary to purchase major and secondary end items to repair damage to Army aircraft sustained during the severe storm at Fort Hood, Texas on May 13, 1989.

ARMY MISSILE PROGRAMS

As noted in the committee's finding, the amended budget request proposed serious stretchouts of major sophisticated munitions. The committee adopted a comprehensive proposal to restore funds for munitions programs in the Army in order to sustain efficient production bases and maintain competition.

STINGER MISSILE

The amended budget submission includes $117.5 million in fiscal year 1990 to procure 2,375 Stinger missiles, and $258.8 million in fiscal year 1991 to procure 7,203 missiles. The committee notes that the fiscal year 1990 request represents a steep reduction from the 9,865 missiles authorized and appropriated in fiscal year 1989. The committee does not believe it is efficient to cut back production by 76 percent, and recommends an authorization of $206.5 million for a total 4,375 miussiles in fiscal year 1990 and $258.8 million for a total of 7,203 missiles in fiscal year 1991.

HELLFIRE MISSILE

The amended budget submission includes $138.3 million for the Army and $50.4 million for the Marine Corps to procure a total of 4,200 Hellfire missiles in fiscal year 1990. For fiscal year 1991, the budget includes $137.9 million and $57.1 million respectively for a total of 4,200 missiles.

The committee notes that the Army qualified two producers and has enjoyed substantial cost savings because of the competition. The requested quantity of 4,200 is insufficient to sustain the minimum production rate for each producer, thus nullifying the benefits of competition. The Hellfire production rate has permitted a vigorous competition. The committee believes it is unwise to jeopardize the competition at this point, and recommends a total authorization of $282.2 million for 7,000 missiles in fiscal year 1990, and $289.7 million for 7,000 in fiscal year 1991.

TOW MISSILE

The amended budget request includes $114.7 million for 9,455 TOW missiles for the Army and $10 million for 839 missiles for the Marine Corps in fiscal year 1990. For fiscal year 1991, the Army proposes $168.7 million for 13,284 missiles and the Marine Corps proposes $10 million for 900 missiles.

The committee notes that the Army has a substantial number of TOW missiles, but over half of the existing TOW inventory are early model basic and improved TOW missiles, which are tactically obsolete against modern Soviet tanks.

The committee notes that the Army is initiating a competition for TOW missile production, despite the fact that the existing producer has sufficient capacity to manufacture 30,000 missiles a year. The committee questions whether projected annual production quantities are sufficient to justify a second source. Therefore, the committee directs the Secretary of the Army to obtain two sets of bids from prospective bidders, one based on annual competitions and one based on a "winner take all" multiyear procurement. The most cost-effective alternative for the purchase of TOW missiles should be selected.

In order to accelerate the fielding of the most effective variants, the committee recommends an authorization of $165.8 million for 13,755 missiles for the Army and the requested level for the Marine Corps for fiscal year 1990. The committee recommends the requested level for fiscal year 1991.

MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)

The amended budget request includes $311.4 million for procurement of 24,000 MLRS rockets in fiscal year 1990 and advance procurement of $63.4 million for fiscal year 1991. The committee is disturbed at the serious stretchout of the production rate of MLRS rockets. The most efficient production rate is 72,000 a year, which was achieved in fiscal years 1986, 1987, and 1988. A proposed production rate of 24,000 represents an extremely inefficient utilization of existing facilities.

Consequently, the committee recommends an authorization of $440.2 million for 48,000 rockets. This represents an increase of 24,000 rockets and $128.8 million. The committee recommends an authorization of $442.9 million for 48,000 rockets in fiscal year 1991.

ARMY TACTICAL MISSILE SYSTEM (ATACMS)

The amended budget request includes $87.3 million to procure 152 ATACMS missiles in fiscal year 1990, and $7.6 million in advance procurement for fiscal year 1991. This request represented a reduction of 124 missiles and $46.0 million from the original budget request. The reduction was justified on the basis of a four month slip in the production schedule.

The committee does not believe the slip in the program justifies a reduction of this magnitude. The committee notes that the ATACMS missile has had only one failure in its first 14 test flights. In the process, it has demonstrated remarkable accuracy. The reduced funding request would not permit the government to execute the fiscal year 1990 not-to-exceed priced production option that had been negotiated as part of the full scale engineering development contract. The committee understands that procurement costs could increase by as much as 20 percent if the contract is broken at this point.

The committee recommends an authorization of $133.3 million to procure 276 missiles and $7.6 million in advance procurement. The committee recommends authorization of the fiscal year 1991 program as requested.

MUNITIONS INITIATIVE REPORTED SEPARATELY

The committee has combined the funding increases for these five programs, together with increases for the Navy's Standard Missile and the Navy/Air Force High Speed Antiradiation Missile (HARM), into a separate measure that will be offered for the consideration of the Senate during its debate on the defense authorization bill.

LINE OF SIGHT-FORWARD-HEAVY (LOS-F-H) FORWARD AREA AIR DEFENSE SYSTEM (FAADS)

The amended budget submission requests $40.2 million in research and development and $239.9 million in procurement for the Line of Sight-Forward-Heavy (LOS-F-H) Forward Area Air Defense System (FAADS) for fiscal year 1990. Since the amended budget request was submitted, the Army has rescheduled the LOS-F-H test program by adding an additional 10 months of testing. As a consequence, the Army cannot obligate the procurement funds as requested, but needs increased research and development funds to accomplish the additional tests and maintain momentum on the program. Therefore, the committee recommends an authorization of $75.0 million in procurement and $119.2 million in research and development for fiscal year 1990. The committee does not believe it is prudent to authorize funds for fiscal year 1991 until the tests have been concluded.

SUBCOMPONENTS FOR MLRS ROCKETS

The committee recommends a substantial increase in the number of Multiple Launch Rocket System (MLRS) rockets over the amended budget request. The committee notes that the MLRS program has been a model acquisition program, characterized by stable configuration, production procedures, and subcontractors. The committee encourages the Army to continue its successful formula for production of the rockets, to include the rocket motor case and warhead skin metal parts. The committee believes the current contractor and subcontractor base should be sustained.

M88 RECOVERY VEHICLE

The amended budget request proposes termination of the M88A2 recovery vehicle program because of performance problems in the new design and relatively low priority at lower budget levels. The committee notes that the Army will continue to depend on the existing M88 recovery vehicles which have substantial limitations working with later generation M1 tanks. Army witnesses testified that the Army will have to consider a service life extension program (SLEP) for the existing fleet. The committee understands that the Army would examine alternative engines and winching systems in such a service life extension program. The committee recommends that $15 million be provided to initiate such a program, of which $10 million may be obligated for purpose of validating the technical data package for the M88A2 and adapting it for retrofit to existing M88 recovery vehicles.

M1 TANK

The amended budget submission requests $1,033.7 million to procure 448 M1 tanks for the Army and $396.3 million for 155 tanks for the Marine Corps in fiscal year 1990. Further, the amended budget submission requests $245.0 million for the Army and $120.3 million for the Marine Corps for advance procurement to procure a total of 516 tanks in fiscal year 1991.

The committee notes that this is the fifth consecutive year in which the administration proposes to stretchout and delay production of M1 tanks, despite the direction the Congress provided last year to enter into a multiyear contract for procurement of 600 tanks per year. The committee believes the administration's request is inconsistent with the underlying security situation. As the Chairman of the Joint Chiefs of Staff noted in his testimony before the committee, "Put simply, the most glaring weakness in our global posture is our inability to adequately defend Western Europe conventionally."

The committee notes that the Soviet Union produces five times more tanks on an annual basis than does the United States, and the current production rate has not diminished, despite the calls for massive cuts in tank inventories by the Soviet Union. The Soviet tank production is three times larger than the total production *capacity* of the Army's two tank installations.

Therefore, the committee recommends an authorization of $1,033.7 million for the Army and $396.3 million for the Marine Corps for fiscal year 1990, and an authorization of $276.6 million for the Army and $120.3 million for the Marine Corps for advance procurement in fiscal year 1991. The increase in funds for advance procurement is sufficient to produce 600 tanks in fiscal year 1991. The committee directs the Department to adjust the five year plan to accommodate the multiyear contract as approved in last year's budget request.

The committee also notes that the budget submission includes $32.8 million to terminate production of M1 tanks at the Detroit Army Tank Plant, and to move that production capacity to the Lima Army Tank Plant. The Army testified that it will require $135 million to accomplish that transfer, despite the fact that only $85 million is included in the five year plan. Moreover, the Department testified that once the transfer is completed, it expects to save only $11 million a year. In summary, the Department is proposing to spend $135 million in order to save $11 million per year once the transfer is complete.

The reason it costs so much to consolidate the tank plants and saves so little once the consolidation is complete rests in the nature of the tank manufacture process itself. The Lima tank plant fabricates the hulls, turrets, and the special armor. The Detroit tank plant machines the high precision, load-bearing structures that carry the forces from the cannon into the chassis. The two plants ship the unique components they manufacture to the other tank plant. Only final assembly is carried on in both tank plants and could be consolidated. As such, moving the sophisticated tools and equipment from Detroit to Lima would require substantial investment, but the savings would be limited to the relatively small overhead required to support two separate assembly lines. Because of the unique nature of the tank manufacture process, the decision to consolidate operations would appear to be a poor decision on economic grounds, irrespective of the impact it would have on mobilization capacity.

Consequently, the committee directs the Army to take no steps to deactivate production at the Detroit Army Tank Plant or to alter the current basic manufacturing procedures at the two plants. The committee reduced the Army's request by $32.9 million (Production Base Support, WTCV), which had been included to close the Detroit Army Tank Plant but which is not justified, and recommends a provision (sec. 121) prohibiting the lay-away of the plant.

Finally, the committee notes that the fiscal year 1990 requests proposes production of the first M1 tanks in the so-called "block 2" configuration. The Department testified that the block 2 tank will be over 50 percent more capable than the M1A1 configuration. The committee endorses the Department's plans for block 2. However, the committee notes that the Department has unnecessarily limited the effectiveness of the block 2 tank by constraining the program to an artificial cost ceiling of $300,000 (constant fiscal year 1989 dollars) per vehicle. With that price constraint, the Army will not be able to include the features that provide the greatest performance improvement. The committee is especially concerned that the cost cap will threaten incorporation of distributed data and power bus architecture and electronics standardization.

Therefore, the committee directs that the funds provided in fiscal year 1990 my be obligated only for M1 tanks in a block 2 configuration that includes the core tank data and power distribution system, not withstanding any artificial cost ceiling. The Army is directed to reprogram $14.2 million of prior year contract savings in the M1 program to insure that the data and power distribution system is integrated and tested in the block 2 program.

ARMY AMMUNITION (FISCAL YEAR 1990)

The committee recommends an increase of $73.2 million for high priority ammunition programs identified by the Army during hearings on the defense budget request. These increases are summarized below:

Change to amend fiscal year 1990 request

Item:	*Millions*
AT-4	+$3.0
Ctg, 25mm, M919	+10.0
Classified item	+9.9
Grenades, all types	+7.3
MOUT Fuze	+18.0
Ctg, 20mm, M940	+10.0
Ctg, 40mm, M430, HEDP	+15.0
Total	+73.2

In addition, the committee recommends a series of fact-of-life adjustments based on revised training requirements and other program execution considerations. These adjustments are summarized below, and include increases of $119.2 million, offset by decreases of the same amount.

Cartridge, 35mm, Sub-Cal, XM468	−$12.4
Cartridge, 105mm, TP-T, M490A1	−15.0
Cartridge, 105mm, DS-TP, M724A1	−16.5
M203 prop charges	−64.0
105mm HERA	−7.9
AT-4 trainer	−3.4
Cartridge, 120mm TP-T, M831	+20.4
Cartridge, 120mm TPCSDS-T, M865	+21.9
M119, 155mm, RB	+33.0
M3, 155mm, GB	+28.7
Demo Kit, M180	+11.8
AT-4	+3.4
Total	0

The committee also recommends transfer of $71 million from the Operation and Maintenance, Army account for upkeep of inactive Army ammunition plants.

ARMY AMMUNITION (FISCAL YEAR 1991)

The committee recommends an increase of $159 million to the Army's ammunition request for fiscal year 1991. Of this amount, $32 million is for an additional 39,000 rounds of the AT-4 to bring the fiscal year 1991 buy to the minimum economic production rate. The remaining $159 million will maintain production of the 155mm M864 artillery round at the fiscal year 1990 production rate.

RADFORD AMMUNITION PLANT

The Radford Ammunition Plant manufactures propellants and explosives for all service ammunition. Several projects could be undertaken by the Army or the operating contractor to improve safety at this plant.

The committee believes that these projects would be extremely beneficial. The Army is directed to ensure that safety-related projects and activities are fully funded and implemented at the Radford Ammunition Plant.

MISSISSIPPI AMMUNITION PLANT

The Army has proposed to put the newly constructed Mississippi Army Ammunition Plant into standby status for mobilization. The plant represents a capital investment of approximately $622 million. The cost to lay away the plant is estimated to be $50 to $75 million in addition to an annual expenditure of $13.5 million per year to maintain it in a standby status.

The committee directs the Department of Defense to report by December 31, 1989 on potential alternative uses for this plant. The study should examine, but not be limited to, foreign sales and third party work.

2,500 GALLON COMBAT VEHICLE REFUELER

The Army is procuring 10-ton trucks in several configurations. One configuration is as a 2,500-gallon tanker refueler. The committee understands that the Army will have a substantial shortfall of 2,500 gallon tankers after the procurement of 10-ton trucks is concluded. The Army is developing a successor for the truck, but that program does not envision a tanker variant. The committee understands that there is an opportunity to alter the mix of 10 ton trucks to be manufactured with funds appropriated in fiscal year 1989 so that a larger number of tankers are manufactured than in the original plan. The committee recommends a provision (sec. 122) that requires that not less than $29 million of the funds appropriated for 10-ton trucks in fiscal year 1989 shall be used exclusively for purposes of procuring and installing an additional 480 tanker-mission kits over the original production plan.

TACTICAL WHEELED VEHICLE SERVICE LIFE EXTENSION PROGRAM

The Army's tactical wheeled vehicle master plan called for a service life extension program for 2½-ton trucks starting in 1993, and for 5-ton trucks starting in 1995. The committee believes that the deteriorating condition of current trucks may justify an acceleration of those service life extension programs. The committee requests the Secretary of the Army to provide by March 1, 1990 a plan to refurbish 2½-ton and 5-ton trucks beginning in fiscal years 1992 and 1993 respectively. The plan should include refurbishment of trucks in both the Active and Reserve component fleets.

SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (SINCGARS)

The amended budget submission includes $290.7 million in fiscal year 1990 to procure SINCGARS radios. The radio is undergoing a substantial modification. Originally the encryption devices for communication security were not designed to be integrated into the radios. Two years ago, the Army decided to integrate the appropriate encryption devices. The amended budget request for fiscal year 1990 represents the first year that all SINCGARS radios requested would be manufactured with embedded integrated communications security components.

The integrated SINCGARS radios represent a qualitatively different radio from the non-integrated version. The Director of Operational Test and Evaluation has certified that the non-integrated radios meet sufficient operational standards to justify full rate production, but that the integrated SINCGARS radios will not complete operational testing until the spring or summer of 1991. Yet the Army's procurement request proposes procurement of as many as 27,625 integrated SINCGARS radios, despite the fact that only 2,100 are required to conduct the operational tests that must precede a decision to enter full rate production.

The Army has decided to increase production of integrated SINCGARS radios above a rate of 730 radios per month until the completion of operational testing. This decision reduces the number of radios required in fiscal year 1990. As a result, the committee recommends an authorization of $140.7 million (of which $9.1 million is for the Army National Guard) for radios for fiscal year 1990. This level is sufficient to sustain the 730 monthly production rate directed by the Secretary of the Army until operational testing is completed. This plan would produce over 8,000 radios prior to completion of operational test, but the committee believes the need for SINCGARS radios, and the reliability demonstrated on the non-integrated radios, justifies the amended production level.

SMALL AEROSTAT SURVEILLANCE SYSTEM

The Army had fielded a small aerostat surveillance system, but its performance was disappointing. It failed to identify targets and suffered an excessive false alarm rate. For these reasons, the Army removed the system from its forward location and is seeking additional research and development and procurement funding to correct performance deficiencies. The committee believes there is sufficient promise to warrant continued research and development, but does not believe the current performance justifies procurement at this time. Consequently, the committee recommends no authorization for procurement in fiscal year 1990.

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate----- Change to Request Quantity	-----Senate----- Change to Request Amount	-----Senate----- Authorization Quantity	-----Senate----- Authorization Amount	Bush Revised FY1991 Request Quantity	Bush Revised FY1991 Request Amount	-----Senate----- Change to Request Quantity	-----Senate----- Change to Request Amount	-----Senate----- Authorization Quantity	-----Senate----- Authorization Amount
	NAVY PROCUREMENT CHANGES												
	AIRCRAFT PROCUREMENT												
11	F/A-18 (FIGHTER) HORNET (MYP)	66	1,889,718		5,000	66	1,894,718	66	1,666,451			66	1,666,451
	F-18 PRIOR YEAR SAVINGS				(53,000)		(53,000)						
19	SH-60B ADVANCE PROCUREMENT (CY)		41,900		(8,800)		33,100		38,900				38,900
21	SH-60F ADVANCE PROCUREMENT (CY)		54,027		(27,400)		26,627		35,324				35,324
32	A-4 SERIES		6,339		(2,500)		3,839		6,471		(2,500)		3,971
33	A-6 SERIES		63,387		(200)		63,187		66,347		(200)		66,147
33a	A-6 PRIOR YEAR SAVINGS				(25,000)		(25,000)						
45	H-53 SERIES		29,721		(600)		29,121		30,913				30,913
52	P-3 SERIES		30,725		(10,400)		20,325		114,168		(7,300)		106,868
59	CARGO/TRANSPORT A/C SERIES		1,552		(1,500)		52		1,599		(1,600)		(1)
62	POWER PLANT CHANGES		5,959		(900)		5,059		7,209		(1,100)		6,109
64	COMMON ECM EQUIPMENT		46,781		(12,300)		34,481		104,268		(22,300)		81,968
66	SPARES AND REPAIR PARTS		1,322,707		(5,700)		1,317,007		1,432,950		(5,100)		1,427,850
	MODERNIZATION				151,000		151,000				154,000		154,000
	UNOBLIGATED PRIOR YEAR FUNDS				(333,924)		(333,924)						
					-------						-------		
	TOTAL AIRCRAFT PROCUREMENT, NAVY				(326,224)						113,900		
	WEAPONS PROCUREMENT												
3	TRIDENT II	63	1,598,507	9	101,000	72	1,699,507	52	1,316,597	20	555,275	72	1,871,872
13	HARPOON	190	214,141		(20,000)	190	194,141	184	229,769			184	229,769
14	AGM-88A (HARM) (MYP)	1,162	292,174	200	45,300	1,362	337,474	1,400	354,881			1,400	354,881
15	SM-2 MR	590	310,619	370	79,800	960	390,419	900	552,030			900	552,030
28	DRONES AND DECOYS				25,000		25,000						
37	WEAPONS INDUSTRIAL FACILITIES		16,836		4,500		21,336		24,704				24,704
42	MK-48 ADCAP TORPEDO	320	493,642	(40)	(29,542)	280	464,100	320	408,828			320	408,828
51	TORPEDO MK-46 MODS		8,682		6,000		14,682		11,609				11,609
56	MK-15 CLOSE IN WEAPONS SYSTEM	20	59,990			20	59,990	19	62,046	(2)	(7,200)	17	54,846
57	MK-75 76MM GUN MOUNT	2	7,177		(1,000)	2	6,177				(1,300)		(1,300)
	TRANSFER TO SCN (ENTERPRISE)				(7,800)		(7,800)						
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	TOTAL WEAPONS PROCUREMENT NAVY				203,258				6,000,400		546,775		

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount	Bush Revised FY1991 Request Quantity	Bush Revised FY1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	SHIPBUILDING												
2	TRIDENT ADVANCE PROCUREMENT (CY)		140,600		(40,000)		100,600		143,000		(40,000)		103,000
4	SSN-688 CLASS SUBMARINE (NUCLEAR)	1	806,300		(43,000)	1	763,300						
26	LCAC LANDING CRAFT	9	196,400	5	139,766	14	336,166	12	255,900			12	255,900
	ENTERPRISE OVERHAUL (SCN)				129,100		129,100				1,140,500		1,140,500
	FAST SEALIFT SHIP										240,000		240,000
	SEALIFT SHIP ADVANCE PROCUREMENT				20,000		20,000						
	TOTAL SHIPBUILDING AND CONVERSION, NAVY				205,866						1,340,500		

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount	Bush Revised FY1991 Request Quantity	Bush Revised FY1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount
	OTHER PROCUREMENT										
32	SURFACE IMA		8,071				8,071		13,385		(1,800)
42	DIVING AND SALVAGE EQUIPMENT		5,010		(200)		4,810		4,087		(200)
46	SMALL BOATS	239	13,448		(400)	239	13,048	113	13,811		(400)
49	PRODUCTION SUPPORT FACILITIES		16,903		(100)		16,803		15,450		(100)
	OPN TRANSFER TO SCN				(15,300)		(15,300)				
50b	MODERNIZATION				1,010,300		1,010,300				1,030,600
59	AN/SQQ-89 SURFACE ASW COMBAT SYS	7	192,465		(4,700)	7	187,765	9	253,699	(1)	(25,400)
71	LAMPS MK1 ASW SUPPORT		13,051		(1,300)		11,751		12,906		
102	STRATEGIC PLATFORM SUPPORT EQUIPMENT		114,567		(5,000)		109,567		207,532		
133	SHIP COMM ITEMS UNDER $2.0 MILLION		6,702		(3,000)		3,702		7,246		(3,200)
172	CRYPTOLOGIC RESERVES EQUIPMENT		629		(600)		29		395		(400)
175	WAR RESERVE		628		(600)		28		424		(400)
182a	SONOBUOYS-GENERAL INCREASE				45,000		45,000				
192	MACHINE GUN AMMUNITION		13,364		20,000		33,364		13,591		
	ASSET CAPITALIZATION PROGRAM				351,900		351,900				364,800
240	EXPLOSIVE ORDNANCE DISPOSAL EQUIP		11,806		(2,000)		9,806		12,541		(2,200)
257	PASSENGER CARRYING VEHICLES	502	6,818	(30)	(500)	472	6,318	477	6,687	(25)	(400)
258	TRUCKS & TRAILERS		9,930		(1,000)		8,930		10,099		(1,100)
262	TRAILERS/TRUCK TRACTORS		4,611		(700)		3,911		4,627		(1,200)
265	EARTH MOVING EQUIPMENT	152	8,918	(14)	(500)	138	8,418	128	8,961	(11)	(600)
267	MISC CONSTRUCTION AND MAINTENANCE EQUIP		8,964		(200)		8,764		9,044		(700)
268	FIRE FIGHTING EQUIPMENT	61	6,442	(3)	(200)	58	6,242	64	7,107		
269	WEIGHT HANDLING EQUIPMENT	43	9,287			43	9,287	38	9,268	(2)	(1,000)
270	AMPHIBIOUS EQUIPMENT		5,398		16,500		21,898		3,235		
271	COMBAT CONSTRUCTION SUPPORT EQUIPMENT		7,349		(1,600)		5,749		9,603		(1,800)
278	FORKLIFT TRUCKS		6,788		(1,200)		5,588		15,829		(1,300)
279	OTHER MATERIALS HANDLING EQUIPMENT		2,294		(500)		1,794		3,763		(100)
297	NAVAL RESERVE SUPPORT EQUIPMENT		3,824		(3,800)		24		768		(800)
300	COMPUTER ACQUISITION PROGRAM		107,102		(1,000)		106,102		100,694		(900)
	TOTAL OTHER PROCUREMENT NAVY				1,399,300						1,351,400

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	MARINE CORPS PROCUREMENT												
42	AAV7A1 PIP		12,947		(700)		12,247		18,094		(2,400)		15,694
44	M-1 A1 MAIN BATTLE TANK (MYP)	155	396,340			155	396,340	255	653,420	(88)	(267,000)	167	386,420
63	MANPACK RADIOS AND EQUIP		4,271		(800)		3,471		2,470				2,470
66	UNIT LEVEL CIRCUIT SWITCH (ULCS)		48,217		(17,600)		30,617		31,495		(12,900)		18,595
69	SWEEP GENERATOR		3,271				3,271		3,520		(1,600)		1,920
79	TACTICAL AIR OPER MODULE (TAOM)	5	46,639			5	46,639	5	40,662	(2)	(12,800)	3	27,862
82	LEWDD	10	2,389			10	2,389	42	9,844	(10)	(2,000)	32	7,844
87	AN/USM-489 SPECTRUM ANALYZER, PORTABLE	107	4,094	(19)	(700)	88	3,394						
97	MODIFICATION KITS (NONTEL)		8,669				8,669		2,675		(700)		1,975
98	ITEMS LESS THAN $2M (NON-TEL)		1,252		(100)		1,152		944				944
102	M876 TRUCK,MAINTENANCE,TELEPHONE/UTILITY							27	4,856	(6)	(1,100)	21	3,756
108	ENVIRONMENTAL CONTROL EQUIP ASSORT		68				68		1,904		(800)		1,104
118	AMPHIBIOUS ASSAULT FUEL SYSTEM								2,347		(200)		2,147
120	TOPOGRAPHIC/SURVEY EQUIPMENT								3,729		(700)		3,029
122	POWER EQUIPMENT ASSORTED		486				486		12,117		(2,200)		9,917
131	LIGHTWEIGHT DECONTAMINATION SYSTEM							263	3,597		(1,200)	263	2,397
132	DRY CHEMICAL FIRE EXTINGUISHER	300	3,138	(50)	(500)	250	2,638	196	2,102	(46)	(500)	150	1,602
136	SHELTER FAMILY		13,818		(3,100)		10,718		15,104		(3,900)		11,204
137	CONTAINER FAMILY		12,217		(1,700)		10,517		15,313		(2,100)		13,213
139	MODIFICATION KITS								1,511		(100)		1,411
140	ITEMS LESS THAN $2 MIL		3,804		(200)		3,604		2,667		(100)		2,567
141	SPARES AND REPAIR PARTS		61,838		(2,700)		59,138		61,423		(2,800)		58,623
	ASSET CAPITALIZATION PROGRAM				3,400		3,400				3,800		3,800
	MODERNIZATION				5,900		5,900				4,200		4,200
	TOTAL MARINE CORPS PROCUREMENT				(18,800)						(307,100)		

P-1 LINE	ITEM	Bush Revised FY1991 Request Quantity	Bush Revised FY1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount
	FY1991 NAVY PROGRAM DEFERRALS						
	NAVY WEAPONS						
2	TRIDENT I		1,239				--
5	MISSILE INDUSTRIAL FACILITIES		2,378				--
6	TOMAHAWK (MYP)	400	662,570			--	--
38	FLEET SATELLITE COMMUNICATIONS (MYP)	3	200,986			--	--
	TOTAL NAVY WEAPONS DEFERRED				(867,173)		
	OTHER PROCUREMENT NAVY						
25	STRATEGIC PLATFORM SUPPORT EQUIPMENT		56,710				--
65	FBM SYSTEM SONARS		2,895				--
102	STRATEGIC PLATFORM SUPPORT EQUIPMENT		207,532				--
233	STRATEGIC PLATFORM SUPPORT EQUIPMENT		28,468				--
234	STRATEGIC MISSILE SYSTEMS EQUIPMENT		160,535				--
	TOTAL OTHER PROCUREMENT DEFERRED				(456,140)		

NAVAL AVIATION

Last year the committee expressed its concern over naval aviation. The committee noted that there were serious shortfalls in certain categories, and that the average age of combat aircraft far exceeds desired levels and is further deteriorating. Longstanding planning objectives have been summarily discarded in the face of tighter budgets.

While the Navy has ostensibly had a long range planning process for Navy aviation, that process has not guided annual resource allocation decisions. Major aviation decisions have been made too much in the context of immediate budget pressures. The collapse of a systematic long range naval aviation planning and programming process has permitted the substantial erosion in naval aviation with the arrival of tighter budgets.

The committee believes that the Navy must reestablish a planning and programming process that is linked to the budgeting system. Therefore, the committee recommends a provision (sec. 152) requiring the Secretary of the Navy to submit annually a report on Navy aviation requirements and acquisition plans. Because of the long lead times associated with Navy modernization, the plan should cover at least 10 years and indicate clearly the way near term budget proposals support long term force structure objectives.

V-22 TILT ROTOR AIRCRAFT

The administration has proposed to terminate further development or procurement of the V-22 tilt rotor aircraft. The administration based this decision on two major conclusions. First, the Department judged that the amphibious assault mission, for which the V-22 was designed and sized, is not sufficiently important to justify so large an investment as required by the V-22. Second, the Department believed that a lower cost alternative, continued procurement of CH-53 helicopters and modified UH-60 helicopters, was adequate for modernizing Marine aviation requirements. The helicopter alternative is one-third as costly as the V-22 over the next five years, but the differential narrows considerably in life-cycle cost terms.

While the Department of Defense concluded that the cost of the V-22 was not justified for a relatively narrow mission, the committee has received testimony over the years that tilt rotor technology has substantial commercial potential and could relieve severe commercial airport congestion expected in the next decade. Additionally, witnesses have testified that there is substantial export potential for the V-22. The committee believes that realization of the commercial potential could lower the overall costs of the V-22 so that it might become affordable for military applications. As such, the committee has concluded that the promise of the V-22 justifies continuation of research and development to confirm through testing the performance of the aircraft. The Department has invested over $2 billion to develop the V-22. To terminate the program at this time, as proposed, would not permit flight test of the aircraft, despite the fact that 95 percent of the cost to develop it is completed.

If the V-22 is to enter procurement, the committee believes that four fundamental issues must be resolved. The first concerns the viability of tilt rotor technology in commercial aviation. The committee directs the Secretary of Defense, in conjunction with the Department of Transportation and the Federal Aviation Administration, to examine the following key questions:

What is the nature and severity of expected airport congestion? Does the Federal Aviation Administration foresee a role for tilt rotor technology in commercial aviation? What changes to the current air traffic control system, including navigation aids, airspace allocation, and aircraft routing might be required to accommodate tilt rotor aircraft? What changes to airports are planned to help relieve the expected congestion and who will pay for these changes? Are airport planners actively counting on tilt rotor technology?

Second, while the Secretary has these matters under review, the contractors are challenged to demonstrate tangible signs of commercial interest in the V-22. The committee notes private companies are independently financing a substantial portion of the development of the National Aerospace Plane.

Third, the Secretary, in consultation with the Administrator of the Federal Aviation Administration, is directed to survey the export potential of the V-22, and summarize the efforts underway in other countries to develop tilt rotor technology. The Secretary shall also outline what steps the Department of Defense and other departments of the Government are prepared to take in the promotion of the commercial potential of this aircraft in international markets.

Fourth, the Secretary of Defense shall examine innovative alternative arrangements for production of the aircraft that would guarantee quality, delivery schedules, and price in a budget environment where low levels of stable production must be affordable. The committee specifically solicits suggestions from the contractors on how they might introduce total quality management to lower future procurement costs of the V-22.

The Secretary of Defense is directed to coordinate, as necessary, with the Secretary of Commerce, the Secretary of Transportation, the Administrator of the Federal Aviation Administration, and contractors to provide answers to these questions. The committee directs that the Secretary submit a report to the Committees on Armed Services of the Senate and House of Representatives within six months of the enactment of this bill.

The committee also notes the V-22 was initiated as a joint program, with Army and Air Force participation. The V-22 could be well suited to special operations missions. Other witnesses have testified that there are yet more applications for tilt rotor technology beyond the amphibious assault mission. Taken together, and depending on the answers to the four areas outlined above, these examined applications could well justify procurement of the V-22. The committee directs Secretaries of each of the military departments to formally evaluate requirements in their departments for the V-22, and submit a report summarizing their evaluation at the same time the Secretary of Defense submits the report directed above. The Secretaries are encouraged to examine the V-22 in the context of Competitive Strategies if that is appropriate.

One of the factors that reportedly led to the termination of the V-22 was the Department's conclusion that the likelihood of opposed amphibious assault landings does not justify so expensive a program as the V-22 program. The committee believes a thorough assessment of all of the roles and missions of amphibious forces—and not just the opposed amphibious assault mission—is warranted. The committee also believes that the advantages of the V-22 for special operations forces justifies a comprehensive review of those missions. Therefore, the committee directs the Chairman of the Joint Chiefs of Staff to coordinate an examination of the roles and missions of all amphibious forces and the special operations mission, and to report his assessment not later than December 1, 1989.

To provide for continued flight testing of the V-22 and to permit commercial exploitation of the aircraft, the committee recommends an authorization of $255 million for research and development for fiscal year 1990 only. Since procurement funds appropriated in prior years are no longer needed for that purpose, the committee directs those funds may not be obligated for the V-22 program, and shall be used to offset the continuation of the flight test program.

The committee recommends an authorization of $359.3 million for 23 CH-53 aircraft in fiscal year 1990 and $51.7 million for advance procurement for fiscal year 1991. The committee also recommends authorization of the requested level of $69.3 million in research and development to initiate the improvements required to field the CH-53 and UH-60 in Marine Corps units. This is to insure that the proposed alternative capability to the V-22 is available to the Marine Corps should there be no commercial interest in the V-22 aircraft to justify future procurement.

The committee also recommends a provision (sec. 123) which stipulates that the Secretary of Defense may not obligate any funds made available to procure V-22 aircraft. The committee is prepared to reconsider the V-22 program if the flight test program is successful and if there is substantial demonstrated commercial interest that could help reduce the procurement cost of the aircraft to the U.S. Government.

ANTISUBMARINE HELICOPTER (SH-60B) ADVANCE PROCUREMENT

The administration requested authorization of advance procurement of $41.9 million in fiscal year 1990 for multiyear procurement of SH-60B helicopters. The amount included $8.8 million for advanced procurement for fiscal years 1992 through 1994.

The committee recommends authorization of advance procurement of $33.1 million in fiscal year 1990, a decrease of $8.8 million from the request which results from denial of multiyear authority for this program on the grounds the savings fails to meet the legislatively mandated threshold of 10 percent. The Navy is encouraged to continue to seek the additional savings that would qualify this program for reconsideration for multiyear procurement in the next defense authorization request.

ANTISUBMARINE HELICOPTER (SH-60F) ADVANCE PROCUREMENT

The administration requested $54 million in fiscal year 1990 for advanced procurement of SH-60F antisubmarine helicopters. Of the amount requested, $27.4 million was for advance procurement for fiscal years 1992, 1993, and 1994 to support a multiyear procurement starting in 1991. The savings for the miltiyear failed to meet the legislatively mandated threshold of 10 percent and was denied.

The committee recommends authorization of $26.6 million in fiscal year 1990, a reduction of $27.4 million from the request, for advance procurement for the SH-60F program for fiscal year 1991.

IPADS FOR P-3 AIRCRAFT

IPADS (Improved Processor and Display System) is an upgrade to mission avionics intended for use on the Navy's P-3B maritime patrol aircraft. The Navy intends to conduct an evaluation of the system in November of this year.

The committee directs the Secretary of the Navy to report to the Senate and House Committees on Armed Services and Appropriations the results of the evaluation of IPADS upon its completion.

NAVY MISSILE PROGRAMS

As noted in the committee's findings, the amended budget requested proposed serious stretchouts of major sophisticated munitions. The committee adopted a comprehensive proposal to restore funds for munitions programs in the Navy in order to sustain efficient production bases and maintain competition.

HIGH-SPEED ANTI-RADIATION MISSILE (HARM)

The amended budget request for the Navy includes $292.2 million to procure 1,162 HARM missiles in fiscal year 1990, and $354.9 million to procure 1,400 missiles in fiscal year 1991. For the Air Force, $79.3 million for 326 missiles and $45.3 million for 200 missiles over the same period are requested.

The proposed production rate is below the economic minimum production rate for the two producers. The committee believes the competition is a key to lowering the cost of the missile in the long run. Consequently, the committee recommends an increase in authorization of $45.3 million for the Navy for 200 missiles and $109.3 million for 400 missiles for the Air Force for fiscal year 1990.

STANDARD SURFACE TO AIR MISSILES (SM-2)

The administration requested authorization of $310.6 million in fiscal year 1990 for the procurement of 590 SM-2 Standard surface to air missiles.

The request will not sustain a minimum rate for two suppliers at economic order quantities. The committee notes that fiscal year 1989 procurement was for $586.6 million and 1,310 missiles, and the fiscal year 1991 procurement is planned for $552.0 million and 900 missiles.

The committee recommends authorization of $390.4 million in fiscal year 1990 for procurement of SM-2 missiles, an increase of

$79.8 million to the request, and directs that the quantities for fiscal years 1990 and 1991 be combined and the delivery rate adjusted to maintain a dual source strategy.

MUNITIONS INITIATIVE REPORTED SEPARATELY

The committee has combined the funding increases for HARM and SM-2 missiles, together with increases for the Army's Stinger missile, Hellfire missile, TOW missile, Multiple Launch Rocket System rockets, and Tactical Missile (ATACMS), into a separate measure that will be offered for the consideration of the Senate during its debate on the defense authorization bill.

TRIDENT II MISSILE

The committee continues to attach high priority to the development and deployment of Trident II missiles and Trident missile submarines. The committee adopted two provisions (sec. 131 and sec. 241) exempting the Trident II missile program from undistributed reductions or from deficit reduction actions. The committee notes with displeasure that the Navy and the Defense Department have failed to honor the special milestone authorization for fiscal years 1988 through 1992 made for the Trident II program in the National Defense Authorization Act for Fiscal Years 1988 and 1989.

The amount authorized in that act for fiscal year 1990 was $2,215 million; the amount requested in the current amended budget request for fiscal year 1990, in contrast, is only $1,814.607 million. The committee is allocating an additional $101 million above the request for Trident II procurement to bring the total closer to the milestone authorization level. Within this funding level, the Navy is authorized to procure up to 72 Trident II missiles. The committee recommends the original milestone authorization of funds for fiscal year 1991.

POSEIDON AND TRIDENT BUDGET PRESENTATIONS

The Five Year Defense Plan (FYDP) for fiscal years 1990 and 1991 incorrectly and inappropriately mixed funding for the Poseidon and Trident SSBN programs. Moreover, Navy budget justification material submitted to the committee on procurement of strategic platform support equipment fell short of the amounts listed in the Five Year Defense Plan. Accordingly, the committee recommends a reduction to the request for strategic platform support equipment of $5 million.

In all future budget submissions, including the FYDP, the Navy is directed to ensure that funding is displayed more rationally and clearly for Trident and Poseidon submarine and missile research, development, testing and evaluation; procurement; military construction; and operations and maintenance. The committee mandates this change, first, because the committee has always sought to protect Trident funding, and second, because it is necessary to avoid the impression that funding for Poseidon is increasing even as the force is being phased out of service. For this reason, the committee makes no recommended authorization for any of these accounts for fiscal year 1991.

TRIDENT II MISSILE MODIFICATIONS REPORT

The draft START Treaty, if signed and ratified, would limit the total number of ballistic missile re-entry vehicles (RVs) to 4,900. Some discussion of the post-START U.S. force structure has focused on the number of Trident submarines that the U.S. could or should maintain under a START regime. The current counting rule for Trident submarines under START is 24 Trident II missiles, with each one carrying 8 independently-targetable RVs. Several options have been proposed, including reducing the production rate of Trident submarines to 2 submarines every 3 years or less, and sealing some of the 24 missile tubes on each Trident submarine.

The committee requests that the Secretary of Defense carry out a classified study to examine a third option: downloading the number of RVs per missile by one or two warheads, and using the resulting missile configuration to extend the missile range, and thereby, the broad ocean operating areas of the Trident weapons system. The reduction in warheads would be discounted accordingly from the overall number of RVs counted against the 4,900 ceiling for each country. The study should evaluate the resulting missile performance, the effect on accuracy of increased missile range, possible alternative uses for the excess missile throwweight, and the verifiability of any such modifications from the context of the requirement to verify various missile RV loadings under a START Treaty. The Secretary of Defense is requested to provide this report to the Committees on Armed Services and Appropriations of the Senate and House of Representatives not later than March 15, 1990.

PHOENIX MISSILE

The administration has proposed termination of production of Phoenix air-to-air missiles after fiscal year 1990. The committee has reservations over termination of the Phoenix missile. Four years ago, when the Navy was seeking to qualify a second manufacturer to produce the missile, the Navy argued that the inventory goal for the missile exceeds 7,000 missiles. This year it argues that its inventory goals are less than 4,500. If the Phoenix missile is terminated after fiscal year 1990, the Navy will have approximately 2,500 C-model missiles. (The Navy also has a number of early generation A models, which are tactically obsolete against modern combat aircraft.) At these inventory levels, each F–14 fighter would be limited to one load of missiles.

Further, the committee notes that the next generation Advanced Air-to-Air Missile (AAAM) will not be fielded until near the end of the next decade. The committee strongly supports the AAAM program, but has reservations about the absence of a long range air-to-air missile production line for such a long period.

The committee supports the Secretary of Defense's decision to terminate a number of weapon systems as a means of bringing the defense program in line with budget resources. While those terminations make sense for programs which entail substantial operating and support costs, the Phoenix missile does not in itself create operating and support costs or commitments.

In light of these concerns, the committee directs the Department of Defense Munitions Council to evaluate the Navy's procedures for establishing inventory requirements and the risk associated with a gap in long-range missile production. The committee requests the Secretary of Defense to review the Phoenix missile program after the Munitions Council has reviewed the program and determine whether or not termination is appropriate at this time. The committee requests the Secretary to relay the findings of the Munitions Council to the Congress not later than March 1, 1990.

TACTICAL AIR LAUNCHED DECOY (TALD)

The Navy did not request funds to continue procurement of Tactical Air Launched Decoys (TALD) in fiscal year 1990. The Navy has acquired 2,475 decoys in previous years, but has a requirement for as many as 4,400. The committee recommends an authorization of $25 million for TALD decoys in fiscal year 1990.

NAVY WEAPONS INDUSTRIAL FACILITIES

The committee recommends that $4.5 million be provided to continue the modernization of the Allegany Ballistics Laboratory, a government-owned, contractor-operated facility in West Virginia which currently produces propulsion units for Navy missiles.

UHF FOLLOW-ON

The committee directs the Under Secretary of Defense for Acquisition to re-evaluate the Navy's plans for commercial-type launch services for the UHF follow-on communications satellite program now that the Navy has decided that launch services are not going to be part of the multi-year contract. The Under Secretary of Defense for Acquisitions's evaluation should include both the cost of launch services, as opposed to Air Force launch, and the policy issue of DoD versus commercial launch. The Department of Defense's apparent long-term goal is to launch satellites by uniformed military personnel, which appears to be in conflict with recent commercialization initiatives. The Under Secretary of Defense for Acquisition is directed to inform the Committees on Armed Services and Appropriations of the Senate and House of Representatives on the results of this evaluation by March 1, 1990.

MK 48 ADVANCED CAPABILITY TORPEDOES

The administration requested $493.6 million in fiscal year 1990 for procurement of 320 MK 48 Advanced Capability (ADCAP) torpedoes.

The committee recognizes that some testing considerations should be satisfied before proceeding with maximum production of these weapons. The testing is planned, and funds for an appropriate target have been provided elsewhere in this report; however, the committee believes procurement should go forward at lower levels until these testing issues are satisfied.

The committee recommends authorization of $464.1 million in fiscal year 1990 for the procurement of 280 MK 48 ADCAP torpedoes, a reduction to the request of $29.542 million and 40 torpedoes.

ASSIGNMENT OF PROGRAMS TO THE WEAPONS PROCUREMENT, NAVY ACCOUNT

The committee notes the assignment of programs to the Weapons Procurement, Navy (WPN) and Other Procurement, Navy (OPN) accounts is not consistent. For example, WPN includes funding for fleet communications satellites while OPN includes ammunition for naval guns.

The committee believes the WPN and OPN accounts should be reviewed and modified to rationalize program assignments and thereby simplify review of budget requests. The committee recommends funding for expendable ordnance and sonobuoys be included in the WPN account and that funding for any satellites now included in the WPN account be shifted to OPN. Moreover, the committee believes the OPN account presentation should be changed in order to highlight OPN funds which support ship overhauls.

The committee directs the Secretary of Defense to modify the assignment of programs to the WPN and OPN accounts in order to simplify congressional review and oversight. A summary of any changes made shall be submitted together with the amended defense budget request for fiscal year 1991 and, in any event, not later than January 31, 1990.

TRANSFER FROM WPN TO SCN FOR U.S.S. ENTERPRISE

The refueling and modernization of U.S.S. *Enterprise* is discussed elsewhere. Funds requested in the Weapons Procurement, Navy account in support of *Enterprise* totaling $7.8 million have been consolidated in the Shipbuilding and Conversion, Navy account.

MK 46 TORPEDO SPARES

The administration did not request funds for procurement of MK-46 torpedo spares, in anticipation that foreign military sales would be sufficient to continue the existence of the MK-46 production line.

However, foreign military sales will not suffice to maintain this production line; therefore, it is important that the government procure necessary spares before the line is shut down.

The committee recommends authorization of $6 million for procurement of MK 46 torpedo spares.

TRIDENT SUBMARINE ADVANCE PROCUREMENT

The committee approved the requested amount for Trident submarines but reduced the amount of advanced procurement funds by $40 million each in fiscal years 1990 and 1991, in order to bring the advanced procurement funds more nearly in line with the requests in previous years.

LOS ANGELES (SSN 688) CLASS SUBMARINE

The administration requested authorization of $714.0 million in fiscal year 1990 for procurement of one *Los Angeles* (SSN 688) class submarine.

In fiscal years 1988 and 1989, advance procurement funds were provided for the planned procurement of two SSN 688 class submarines in fiscal year 1990; however, the administration has only requested one SSN 688 class submarine in fiscal year 1990. Not all prior year advanced procurement funds previously provided are required.

The committee recommends authorization of $671.0 million, a reduction of $43 million, in fiscal year 1990 for procurement of one SSN 688 class submarine.

ECM EQUIPMENT ON DDG-51 CLASS DESTROYERS

As a result of lessons learned in the Persian Gulf, the Navy is equipping FFG-7 class guided missle frigates with electronic countermeasures (ECM) equipment. Active ECM capability is already provided for *Ticonderoga* (DDG-51) class cruisers. However, destroyers currently under construction will not have a similar capability.

The committee urges the Navy to include active ECM capability in the next flight of *Arleigh Burke* (DDG-51) class destroyers.

LANDING CRAFT AIR CUSHION (LCAC)

The administration requested authorization of $196.4 million in fiscal year 1990 for the procurement of 9 air cushion landing craft.

The committee recommends authorization of $336.2 million in fiscal year 1990, an increase of $139.8 million, for the procurement of 14 air cushion landing craft, an increase of 5 over the request.

FAST SEALIFT SHIP PROCUREMENT

The committee believes authorization of long lead funding for a sealift ship is warranted given the current state of military sealift and the likely needs for an increase in this capability in the future strategic lift equation.

To ensure maximum utility in the fleet, the committee directs the Navy to enhance the multi-mission capabilities of fast sealift ships for the amphibious lift mission as well as other missions, if possible. To assist with this effort, a companion research and development program which contains additional guidance has been created.

The committee anticipates the five-year profile for this program will include long lead funding for one ship in fiscal year 1990, full funding for the first ship in fiscal year 1991, skipping one year, and funding for ships in fiscal years 1993 and 1994. The committee intends to identify funding for this program from within contract savings in strategic lift and from the annual shipbuilding program. The Department is encouraged to include the fast sealift procurement in its revised budget requests and five year plan.

The committee recommends authorization of $20 million for long lead funding of a sealift ship in fiscal year 1990. Authorization of $240 million is included in fiscal year 1991 for full funding.

AIRCRAFT CARRIER TECHNOLOGY STUDY

The committee notes current aircraft carrier technology has evolved from design concepts fairly well developed at the midpoint of this century. The committee recognizes that any new carrier authorized at any time in the future will not be delivered until after the year 2000 and can be expected to be operating at the midpoint of the next century. Given these circumstances, the time is appropriate for a disciplined inquiry to identify and understand how evolving, emerging, and desired technologies might be combined and/or targeted to ensure the nation continues to enjoy superiority in the technology of sea-based aviation.

Without intending to limit the inquiry, the committee believes that base rights in the world are sufficiently uncertain to warrant examining future carriers in terms of mobile bases. Recent limited experience in the Persian Gulf suggests such a concept may have great validity, particularly if all tactical military aircraft are capable of using such a base. The broad ramifications of this basing mode for the design and construction of all military aircraft should be included in this study. Consideration should be given to what possible architectural freedoms might result if it is possible to move away from steam catapults and arresting gear and whether these would dictate changes in aircraft design or ship design, or both. Also, the inquiry should consider whether it is possible to achieve higher speeds in displacement ships by optimizing hull designs for much greater propulsion power levels.

The committee requests the Secretary of the Navy to commission an independent study by the National Academy of Sciences for the purpose of examining these questions and producing an integrated technology plan for the evolution of aircraft carriers in the first half of the twenty-first century. The study, together with comments by the Navy, is requested to be submitted to the Senate and House Committees on Armed Services and Appropriations within 18 months of the enactment of this bill.

The committee also commissions the Congressional Office of Technology Assessment to conduct a similar study and to report to the Senate and House Committees on Armed Services and Appropriations in the same time frame.

The committee believes this report will provide essential information for informed consideration of whether or not to build additional new aircraft carriers.

U.S.S. ENTERPRISE (CVN 65) REFUELING/MODERNIZATION (REMOD)

The administration requested authorization of funds in the Operations and Maintenance, Navy (O&MN) account, the Other Procurement, Navy (OPN) account and the Weapons Procurement, Navy (WPN) account in fiscal years 1990 and 1991 to allow refueling and modernization (REMOD) of U.S.S. *Enterprise* to begin in January 1991. The REMOD is scheduled to last 45 months, completing in September 1994. $565 million was authorized and appropriated for this program in various accounts in prior years.

The committee recognizes that nuclear refuelings and ship overhauls are normally funded in the Operations and Maintenance, Navy (O&MN) account; however, the nature of the work, its dollar value, and the time required for *Enterprise* REMOD closely approximates that to be expected with new ship construction. Accordingly, the committee believes funding responsibility is most appropriate in the Shipbuilding and Conversion account where efficiencies in contracting may be gained by virtue of the requirement for full funding of the program.

The committee recommends the request for authorization of funds for the nuclear refueling and modernization of U.S.S. *Enterprise* be approved, but that funding accountability be transferred from the accounts indicated and in the amounts indicated to Shipbuilding and Conversion (SCN) for fiscal years 1990 and 1991.

[In millions of dollars]

	1990	1991
O&MN	106.0	840.5
OPN	15.3	26.4
WPN	7.8	
Total	129.1	866.9
Transfer to SCN	129.1	866.9

In addition to the funds indicated for transfer, an additional $300 million planned for the REMOD of U.S.S. *Enterprise* in fiscal years 1992 and beyond has been included in the fiscal year 1991 authorization to achieve full funding.

NUCLEAR AIRCRAFT CARRIER REFUELING AND MODERNIZATIONS (REMODS)

The administration plans to begin the refueling and modernization (REMOD) of the first of a number of nuclear aircraft carriers in January 1991. The physical details and circumstances of the first of these ships, U.S.S. *Enterprise*, differ substantially from those that will follow. Still, the anticipated dollar value of each REMOD, and the fact the ships enter the program following closely upon one another, indicate the most coherent and efficient management approach will result from placing funding responsibility within the Shipbuilding and Conversion account. Indeed, the time these ships will be unavailable for fleet operations will be equal to or greater than the conventionally powered aircraft carriers in the Service Life Extension Program (SLEP), presently funded in the Shipbuilding and Conversion account.

The Committee recommends the Navy include funding for future nuclear aircraft carrier REMODs in the Shipbuilding and Conversion account and characterize the operational status of these ships in the same manner as that of the conventionally powered aircraft carriers in the Service Life Extension Program.

INTEGRATED ELECTRIC DRIVE SHIP INSTALLATION

The Committee has assessed the importance of integrated electric drive and noted a number of opportunities for application of this technology have passed by. The benefits of this technology and the possibilities it presents are very significant, and integrated electric drive propulsion should be installed in an operational ship at the earliest possible time.

The Committee directs that flight three of the DDG–51 *Arleigh Burke* class destroyers should be the target for installation of integrated electric drive propulsion.

PACIFIC MISSILE RANGE FACILITY

Improvements to current missile range facilities will be required in order to support operational testing of the first *Arleigh Burke* (DDG–51) class Aegis destroyer as well as the SM–2 Block IV missile now under development.

Concern for range safety, as well as an operational requirement for firing zones with fewer restrictions, dictates that the range be located in an area relatively clear of civilian shipping, boating, and air traffic. The range currently used by the Navy which is most remote from civilian traffic is the Pacific Missile Range Facility at Barking Sands, Kaui. It is already used by the Navy for Combat System Ship's Qualification Trials (CSSQT).

The Committee encourages the Secretary of Defense to allow the use of savings in the Aegis shipbuilding program for the improvement of test facilities necessary for operational testing of Aegis ships.

NAVY SHIP DESIGN

Shipbuilding and ship design should be closely coordinated; however, the current practice of funding the later stages of ship design in the Research, Development, Test, and Evaluation (RDT&E) account produces needless complications in the planning and administering of the Navy's shipbuilding programs.

The Committee recommends a provision (sec. 227) which would transfer funding of preliminary design and contract design out of the RDT&E account beginning in fiscal year 1991.

SHIPBUILDING CONTRACTS

Section 787 of the Department of Defense Appropriations Act for Fiscal Year 1984 was intended to address problems perceived to arise from delays in the submission of shipbuilding claims. This provision prohibited the Secretary of a military department from adjusting shipbuilding contracts to allow claims which arose out of "events" occurring more than 18 months before the submission of the contractor's claim. The provision further provided that the claim, request, or demand would be considered "submitted" only when the contractor had certified and provided supporting data for the claim, request or demand as required by section 6(c)(1) of the Contracts Disputes Act of 1978.

When this statute was reenacted as permanent legislation (10 U.S.C. 2405) in the Department of Defense Authorization Act for Fiscal Year 1985, this committee acknowledged the possibility of problems in defining "events" for the purposes of determining when the limitation period begins to run. The committee considered but declined to define "events" because the committee understood that the Department of the Navy would implement the statute "consistent with the general guidance provided." However, the committee expressly stated that "If [it] should learn at a later time that the statute is being implemented in such a way as to treat shipbuilders in an inequitable fashion, the committee would look more closely at actual amendment of the statute."

Contrary to the committee's understanding, no regulations have been published and no contract clause has been developed which would implement the statute through contract provisions consistent with its legislative history.

The committee now understands that the Navy is attempting to clarify the application of the statute by addressing those problems which have arisen on a case-by-case basis. However, because the Navy has acknowledged "errors in administration by both parties" and the problems still exist, the committee believes it is necessary to give special attention to this matter.

The committee directs the Secretary of the Navy to seek early promulgation of regulations interpreting the statute, preferably within six months, and to incorporate standard clauses in shipbuilding contracts addressing this matter. Also, the committee directs the Under Secretary of Defense for Acquisition to report to the Senate and House Committees on Armed Services and Appropriations within eight months after enactment of this bill and every six months thereafter on the Navy's administration of the statute, until such time as implementing regulations have been published.

MK 45 GUN MOUNT AND MK 6 AMMUNITION HOIST MULTIYEAR PROCUREMENT

The administration requested multiyear procurement authority in fiscal year 1991 for MK 45 gun mounts and MK 6 ammunition hoists funded in the Shipbuilding and Conversion account as part of the DDG–51 procurement line. The proposed multiyear procurement of 19 guns and hoists offer a savings opportunity of 45 percent over annual procurements in fiscal years 1991 through 1994.

The committee recommends approval of the request for multiyear procurement authority beginning in fiscal year 1991 for 19 MK 45 gun mounts and MK 6 ammunition hoists.

SPS-48E RADAR

The AN/SPS–48E is a three-dimensional air-search radar currently being installed on guided missile cruisers and destroyers as part of the New Threat Upgrade program. It has significantly greater resolution and reliability than earlier versions of the SPS–48 radar.

At present, the older versions of these radars are being installed on aircraft carriers. Upgrade of the SPS–48 radars on carriers to the SPS–48E version would improve their air-search capability and reduce maintenance requirements.

The committee believes the Navy should consider installation of SPS–48E radars on aircraft carriers and submitting a reprogramming for this purpose.

SQR–18 TOWED ARRAY SONAR

The fiscal year 1989 authorization and appropriation for the SQR–18 towed array sonar system used on the FF–1052 class frigates was $14.2 million. The Navy was directed to use those funds to outfit the last three ships of that class still lacking a towed array. Recently, a modified version of the SQR-18 has been proposed that has greatly increased submarine detection capability due to use of the newest state-of-the-art computer chip technology.

The committee does not pose an objection to a decision by the Navy to use the fiscal year 1989 funds to procure prototypes of the modified version of the SQR-18 for at-sea testing.

SONOBUOYS

The administration requested authorization of $115.5 million in fiscal year 1990 for the procurement of five types of sonobuoys: AN/SSQ-36, AN/SSQ-53, AN/SSQ-57, AN/SSQ-62, AN/SSQ-77.

The committee has indicated in the past its desire that the Navy fully fund its sonobuoy requirements so sufficient quantities of tactically effective, reliable sonobuoys are available to meet wartime fleet requirements and peacetime requirements for fleet operations and training. The committee believes that funding the requirements will result in efficient production lines and favorable prices. The committee notes that the increasing operational challenge represented by quieter Soviet submarines increases the usage rate of sonobuoys and makes increased funding ever more critical.

The committee recommends authorization of $160.5 million in fiscal year 1990, an increase of $45 million to the request for the purchase of sonobuoys of all types.

AMPHIBIOUS EQUIPMENT

The committee recommends authorization of $21.9 million in fiscal year 1990, an increase of $16.5 million over the request, for amphibious equipment to provide for procurement of the Offshore Petroleum Discharge System (OPDS).

The committee supports procurement of OPDS as an important capability for supplying Army and Marine Corps forces engaged in combat operations ashore where no port infrastructure for bulk fuel operations exists.

The fiscal year 1990 funds will allow the Navy to exercise the final option to a 1986 fixed price contract and to take advantage of the highly favorable prices previously negotiated.

TRANSFER FROM OPN TO SCN FOR U.S.S. ENTERPRISE

Refueling and modernization of U.S.S. *Enterprise* is discussed elsewhere. Funds requested in the Other Procurement, Navy account in support of *Enterprise* totalling $15.3 million have been consolidated in the Shipbuilding and Conversion, Navy account.

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY 1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	AIR FORCE PROCUREMENT CHANGES												
	AIRCRAFT PROCUREMENT												
2	B-2A	3	2,107,974		(300,000)	3	1,807,574	5	2,609,188			--	--
14	C-17 (MYP)	6	1,523,971		(99,400)	6,	1,424,571	10	2,010,155			10	2,010,156
19	CIVIL AIR PATROL A/C	38	2,000		500	38	2,500	38	1,801			38	1,801
26	A-7		56,700		(52,800)		3,900		22,500		(22,500)		
27	A-10		53,342		(20,900)		32,442		70,600		(8,300)		12,300
28	F/RF-4		64,900		(37,600)		27,300		75,300		(46,900)		28,400
30	F-15		215,536		(5,500)		210,036		254,574		(9,300)		245,274
31	F-16		228,100		(10,700)		217,400		315,800		(35,800)		280,000
35	C-5		55,700		(28,300)		27,400		56,251		(28,100)		28,151
39	C-141		31,200		(1,800)		29,400		42,700		(2,600)		40,100
44	C-12		3,500		(300)		3,200		1,000		(200)		800
48	C-130		117,050		(42,600)		74,450		130,900		(47,800)		83,100
49	SOF C130		107,400		(11,700)		95,700		98,800		(10,500)		88,300
50	C-135 (MYP)	24	488,310	16	132,000	40	620,310	24	531,000		(8,100)	--	--
55	H-3 AIRCRAFT SYSTEM		700		(500)		200		600		(300)		300
59	OTHER AIRCRAFT		120,023		(59,300)		60,723		78,974		10,800		89,774
64	SPARES AND REPAIR PARTS		3,760,668		(381,600)		3,379,068		4,023,918		(414,500)		3,609,418
70	COMMON GROUND EQUIP		109,153		(62,000)		47,153		14,055		(19,700)		(5,645)
	C-20 PRIOR YEAR SAVINGS				(20,000)		(20,000)						
	UNDISTIBUTED REDUCTION				(70,000)		(70,000)						
	MODFRNIZATION				215,900		215,900				176,700		176,700
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	TOTAL AIRCRAFT PROCUREMENT AIR FORCE				(856,600)						(467,100)		

P-1		Bush Revised		-----Senate------		-----Senate------		Bush Revised		-----Senate------		-----Senate------	
		FY1990 Request		Change to Request		Authorization		FY 1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	MISSILE PROCUREMENT												
16	AGM-88A HARM	326	79,339	500	109,300	826	188,639	200	45,303	500	109,300	700	154,603
18	AMRAAM (MYP)	1,450	902,876	(150)	(75,000)	1,300	827,876	2,200	892,882			2,200	892,882
54	SPECIAL PROGRAMS		3,182,705		(206,600)		2,976,105		3,513,930		(262,800)		3,251,130
	MODERNIZATION				29,400		29,400				24,100		24,100
	UNDISTRIBUTED REDUCTION				(70,000)		(70,000)						
	AIM-9P PRIOR YEAR SAVINGS				(50,000)		(50,000)						
	TOTAL MISSILE PROCUREMENT AIR FORCE				(262,900)						(129,400)		

P-1		Bush Revised		-----Senate-----		-----Senate-----		Bush Revised		-----Senate-----		-----Senate-----	
		FY1990 Request		Change to Request		Authorization		FY 1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	OTHER PROCUREMENT												
1	2.75 INCH ROCKET MOTOR	68,491	15,612	(16,000)	(3,700)	52,491	11,912	65,841	15,179	(16,000)	(3,700)	49,841	11,479
2	2.75 INCH ROCKET HEAD - WP	80,078	6,039	(9,832)	(700)	70,246	5,339	119,763	9,063	(9,919)	(800)	109,844	8,263
4	ITEMS LESS THAN $2,000,000		5,817		(1,900)		3,917		7,111		(1,900)		5,211
6	5.56 MM	35,022	5,370	(5,168)	(1,320)	29,854	4,050	55,413	8,790	(2,217)	(300)	53,196	8,490
7	20 MM COMBAT	1,341	4,665	(574)	(2,600)	767	2,065	1,743	6,056	(574)	(2,600)	1,169	3,456
8	20MM TRAINING	9,389	26,996	(3,870)	(13,794)	5,519	13,202	12,637	36,499	(3,870)	(10,800)	8,767	25,699
9	30 MM TRAINING	7,082	58,744	(2,250)	(22,548)	4,832	36,196	7,086	58,707	(2,261)	(18,800)	4,825	39,907
10	40MM TP GRENADES							1,214	1,856	(111)	(100)	1,103	1,756
13	SIGNAL MK-4 MOD 3	1,516	1,759	(593)	(700)	923	1,059	1,576	1,827	(591)	(700)	985	1,127
14	MXU-4A/A ENGINE STARTER							60	7,822	(2)	(300)	58	7,522
16	ITEM LESS THAN 2.0M CARTRIDGES-SOF				(500)		(500)				(700)		(700)
18	MK-82 INERT/BDU-50			33,980	8,462	33,980	8,462	58,861	17,016	(11,273)	(3,300)	47,588	13,716
20	BSU-49 INFLATABLE RETARDER	14,969	5,614	(9,520)	(3,600)	5,449	2,014	14,981	5,611	(9,520)	(3,600)	5,461	2,011
25	BOMB PRACTICE 25 POUND	1584086	24,223	(392)	(6,600)	1583694	17,623	1538518	23,517	(392)	(6,100)	1538126	17,417
34	FLARE, IR MJU-7B	182,311	6,606	(94)	(1,400)	182,217	5,206	91,279	3,158	(94)	(1,400)	91,185	1,758
35	PARACHUTE FLARE LUU-2 B/B	3,818	1,680	(556)	(200)	3,262	1,480	3,860	1,696	(556)	(200)	3,304	1,496
40	ITEMS LESS THAN $2,000,000		17,074		(1,000)		16,074		20,147		(1,200)		18,947
41	FMU-139	36,213	25,148	(2,985)	(2,800)	33,228	22,348	47,392	43,983	(2,985)	(3,000)	44,407	40,983
42	ITEMS LESS THAN $2,000,000		1,302		(200)		1,102		1,340		(200)		1,140
47	SEDAN, 4 DR 4X2	117	876	(23)	(200)	94	676	84	646	(13)	(100)	71	546
48	STATION WAGON, 4X2	61	482			61	482	58	483	(13)	(100)	45	383
49	BUS, 28 PASSENGER	16	630	(9)	(300)	7	330	16	645	(2)	(100)	14	545
51	BUS, 44 PASSENGER	56	3,642	(5)	(200)	51	3,442	67	4,303	(3)	(100)	64	4,203
53	MODULAR AMBULANCE	51	2,065	(4)	(200)	47	1,865	44	1,840			44	1,840
56	TRUCK, STAKE/PLATFORM	517	7,355	(9)	(100)	508	7,255	366	5,089	(22)	(200)	344	4,889
57	TRUCK, CARGO-UTILITY, 3/4T, 4X4	255	4,171	(40)	(700)	215	3,471	206	3,474	(32)	(600)	174	2,874
58	TRUCK, CARGO-UTILITY, 1/2T, 4X2	286	4,118	(23)	(300)	263	3,818	213	3,134	(28)	(500)	185	2,634
59	TRUCK, PICKUP, 1/2T, 4X2	435	4,893	(43)	(400)	392	4,493	388	3,985	(48)	(300)	340	3,685
61	TRUCK MULTI-STOP 1 TON 4X2	410	8,111	(47)	(800)	363	7,311	452	8,531	(42)	(700)	410	7,831
63	TRUCK CARRYALL	210	3,505	(88)	(300)	122	3,205	189	3,085	(17)	(100)	172	2,985
68	TRUCK TRACTOR, OVER 5T	69	3,092	(2)	(100)	67	2,992	77	3,677	(1)	(100)	76	3,577
69	TRUCK, DUMP 5 TON	77	2,931	(9)	(400)	68	2,531	96	3,695	(12)	(400)	84	3,295
71	CAP VEHICLES				800		800						
72	ITEMS LESS THAN $2,000,000		16,714		(1,200)		15,514		11,695		(1,100)		10,595
76	TRUCK TANK FUEL R-11(R-9)	350	33,630	(78)	(7,500)	272	26,130						

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY 1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
79	TRACTOR, A/C TOW, MB-4	3	151			3	151	145	3,651	(5)	(100)	140	3,551
80	TRACTOR, TOW, FLIGHTLINE	3	65			3	65	303	5,627	(57)	(1,100)	246	4,527
85	ITEMS LESS THAN $2,000,000		15,477		(1,500)		13,977		13,175		(1,000)		12,175
89	TRUCK PUMPER P-24(P-8)	36	4,696	(1)	(100)	35	4,596	50	6,522			50	6,522
90	TRUCK PUMPER P-22(P-12)	36	4,084	(3)	(300)	33	3,784	35	3,970	(1)	(100)	34	3,870
91	ITEMS LESS THAN $2,000,000		2,706		(100)		2,606		2,491		(500)		1,991
92	TRUCK F/L 4000 LB GED/DED 144 INCH	220	6,283	(9)	(200)	211	6,083	293	7,335	(14)	(200)	279	7,135
93	TRUCK, F/L 6000 LB	80	1,874	(5)	(200)	75	1,674	103	2,817	(3)	(100)	100	2,717
94	TRUCK, F/L 10,000 LB	163	6,906	(8)	(300)	155	6,606	331	18,411	(14)	(900)	317	17,511
94a	UNDISTRIBUTED REDUCTION-TACTICAL VEH				(30,000)		(30,000)						
100	LOADER, SCOOP	116	7,218	(5)	(300)	111	6,918	103	6,371	(7)	(400)	96	5,971
102	CLEANER, RUNWAY/STREET	86	5,236	(14)	(1,300)	72	3,936	119	8,548	(34)	(2,900)	85	5,648
103	CRANE, 7-50 TON	10	1,614	(1)	(100)	9	1,514	12	787			12	787
107	ITEMS LESS THAN $2,000,000		11,223		(1,300)		9,923		13,682		(1,800)		11,882
117	INTELLIGENCE TRAINING EQUIPMENT		12,181		(3,000)		9,181		11,989				11,989
121	TACTICAL AIR CONTROL SYS IMPROVE		233,078				233,078		264,661		(105,300)		159,361
123	DEFENSE SUPPORT PROGRAM		89,014		(28,300)		60,714		69,389				--
135	CARIBBEAN BASIN RADAR NETWORK		39,951		(11,000)		28,951		16,323				--
177	TACTICAL C-E EQUIPMENT		32,235		(2,200)		30,035		49,308		(2,300)		47,008
185	CAP COM & ELECT				500		500						
187	COMM-ELECTRONICS CLASS IV		19,892		(5,100)		14,792		20,203		(5,300)		14,903
193	ITEMS LESS THAN $2,000,000		31,956		(1,600)		30,356		36,633		(500)		36,133
196	NIGHT VISION GOGGLES-SOF		1,361	(44)	(500)	(44)	861		1,361	(44)	(500)	(44)	861
197	CHEMICAL/BIOLOGICAL DEF PROG	28	56,544	9	8,200	37	64,744	27	67,632	23	20,700	50	88,332
198	ITEMS LESS THAN $2,000,000		3,663		(600)		3,063		5,451		(900)		4,551
201	ITEMS LESS THAN $2,000,000		12,019		(1,400)		10,619		13,113		(300)		12,813
202	GENERATORS-MOBILE ELECTRIC		25,859		(13,900)		11,959		29,155		(3,500)		25,655
204	ITEMS LESS THAN $2,000,000		4,423		(300)		4,123		4,959		(1,200)		3,759
205	BASE PROCURED EQUIPMENT		34,668		(2,600)		32,068		37,229		(3,300)		33,929
206	MEDICAL/DENTAL EQUIPMENT		109,022		(400)		108,622		82,082		(400)		81,682
208	PALLET, AIR CARGO, 108"X88"	4,132	3,721	(78)	(100)	4,054	3,621	4,000	3,700	(100)	(100)	3,900	3,600
217	ITEMS LESS THAN $2,000,000		18,542		(3,200)		15,342		21,009		(2,100)		18,909
218	INTELLIGENCE PRODUCTION ACTIVITY		82,485		(1,700)		80,785		81,610				81,610
221	SELECTED ACTIVITIES		4,732,801		(16,700)		4,716,101		5,012,840		(8,400)		5,004,440
	ASSET CAPITALIZATION PROGRAM				75,000		75,000				75,000		75,000
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	TOTAL OTHER PROCUREMENT AIR FORCE				(111,600)						(111,600)		

P-1 LINE	ITEM	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	FY1991 AIR FORCE DEFERRALS						
	AIRCRAFT PROCUREMENT						
1	B-1B		9,948				--
2	B-2A	5	2,609,188			--	--
3	B-2A ADV PROCUREMENT (CY)		568,900				--
25	B-1B		108,700				--
50	C-135 (MYP)		522,900			--	--
	TOTAL AIRCRAFT PROCUREMENT DEFERRALS				(3,819,636)		
	MISSILE PROCUREMENT						
1	PEACEKEEPER (M-X)	12	645,017			--	--
1a	RAIL GARRISON LAUNCHERS	5	1,006,300			--	--
2	RAIL GARRISON ADVANCE PROC (CY)		133,900				--
3	MISSILE REPLACEMENT EQ-BALLISTIC		40,262				--
4	ADVANCED CRUISE MISSILE	[ ]	[ ]				--
5	ACM ADV PROCUREMENT (CY)	[ ]	[ ]				--
6	HAVE FLAG	[ ]	[ ]				--
23	ADVANCED CRUISE MISSILE	[ ]	[ ]				--
24	CLASSIFIED PROGRAMS	[ ]	[ ]				--
42	DEFENSE SUPPORT PROGRAM (MYP)	1	300,864			--	--
43	DSP ADVANCE PROCUREMENT (CY)		241,900				--
44	DEFENSE SATELLITE COMM SYSTEM (MYP)		62,898				--
45	SPACE BOOSTERS (MYP)	2	206,984			--	--
47	MEDIUM LAUNCH VEHICLE (MYP)	5	207,147			--	--
48	MLV ADVANCE PROCUREMENT (CY)		27,300				--
50	DEFENSE RECONN SUPPORT ACTIVITIES		65,848				--
55	SPECIAL UPDATE PROGRAMS		224,796				--
999	CLASSIFIED PROGRAMS		792,848				--
	TOTAL MISSILE PROCUREMENT DEFERRALS				(3,956,064)		

P-1 LINE	ITEM	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	OTHER PROCUREMENT						
116	INTELLIGENCE DATA HANDLING SYS		8,346				--
123	DEFENSE SUPPORT PROGRAM		69,389				--
124	OTH-B RADAR		218,523				--
127	CHEYENNE MOUNTAIN COMPLEX		11,070				--
135	CARIBBEAN BASIN RADAR NETWORK		16,323				--
136	MARS/USAF-FAA RADAR UPGRADE		55,864				--
137	TAC SIGINT SUPPORT		14,189				--
138	DIST ERLY WARNING RDR/NORTH WARNING		5,198				--
142	IMAGERY TRANS		35,839				--
157	SATELLITE CONTROL FACILITY		93,522				--
158	CONSTANT WATCH		4,568				--
172	MILSTAR		227,813				--
219	TECH SURV COUNTERMEASURES EQ		1,974				--
222	SPECIAL UPDATE PROGRAM		191,345				--
	TOTAL OTHER PROCUREMENT DEFERRALS				(953,963)		

B-1B BOMBER PROGRAM

In section 242 of the National Defense Authorization Act for Fiscal Years 1988 and 1989, the Congress mandated a detailed test program for the trouble-plagued B-1B defensive avionics system. That test program has demonstrated that the as-installed ALQ-161 defensive avionics system cannot meet its original goals and design specifications. The Air Force has accordingly developed a new plan which would limit the coverage of the automated defensive avionics system to a *subset* of the Soviet air defense threats—a so-called "core configuration," which would provide prioritized threat assessments and apply appropriate countermeasures automatically—augmented by a radar warning receiver that would alert the defensive systems operator to hostile threats not covered in the "core configuration," allowing either avoidance techniques or manual application of countermeasures. This plan has been described and documented in hearing testimony on June 13, 1989 and in other classified documents provided to the committee.

The Air Force is confident that this approach will provide significant electronic countermeasures (ECM) capabilities, although clearly more limited than the original goals for the system. The Air Force is also confident that the development of the core configuration of the ALQ-161 and the installation and integration of a radar warning receiver are easily accomplished. The committee, taking due note of the history of the B-1B ECM program, is not persuaded, and believes that the proposed modifications should be thoroughly tested before fleetwide modifications are undertaken. This can help avoid the same problem created by wildly optimistic Air Force projection of B-1B ECM when "selling" the program in 1981 and then producing 100 bombers before any significant testing had occurred.

Accordingly, section 132 established a new test program for the proposed "core configuration plus radar warning receiver" modification, authorizes the modification of up to six B-1B aircraft to the proposed configuration, with these to be used to conduct a test program to be developed by the Secretary of Defense. Upon completion of the test program, the test results are to be analyzed by an independent panel which will provide its recommendations to the Secretary of Defense and the Congress. Until the test program is completed and the independent panel's report is made available, no more than six B-1Bs may be so modified, and the Air Force shall procure no more radar warning receivers than are required to support the test program. Should the testing indicate the need for additional modifications beyond those currently proposed by the Air Force, the committee expects to be informed in timely fashion.

The Air Force had also planned to make use of over $900 million in lapsed "M-account" funds to pay for the "core configuration plus radar warning receiver" modifications to the B-1B fleet. The committee regards as inappropriate the use of "M-account" funds without prior notification to and authorization by the Senate and House Armed Services and Appropriations Committees. The committee expects the Department of Defense and the military departments to request authorization *explicitly* for all major repairs and "corrections of deficiencies," in order to preserve the integrity of the committee's oversight role. Should the test program for the B-1B modifications be successful, the committee expects the Department of Defense to request the funds for fleetwood modifications through normal budget processes. The committee provides elsewhere in this bill legislation addressing the use of "M-acount" funds.

B-2 BOMBER PROGRAM FUNDING LIMITATIONS

The B-2 bomber program has been an item of intense committee and congressional concern as evidenced by the extensive legislative provisions in the last two defense authorization acts. In this year's budget request, the administration is seeking a fourth increment of Low-Rate Initial Production (LRIP) aircrfat, as distinct from development test aircraft. While the LRIP production rate is quite low (8 aircraft in total over the prior 3 years), the first flight of the first developmental aircraft has not yet taken place. This first flight is now some six months delayed from the date anticipated a year ago. Although the B-2 aircraft has many thousands of hours of wind tunnel tests and computer simulations underlying its basic design, skeptics both in and out of government argue that the potential for serious aerodynamic problems still exists. These concerns can only be allayed through a vigorous flight-testing program encompassing the aircraft's performance envelope.

In the absence of significant flight-test data confirming the aerodynamic soundness of the B-2 design, the committee intends to limit LRIP to the minimum rate necessary in order to: (1) preserve schedule continuity; (2) retain in effect certain advantageous fixed-price contracts which have minimum order quantity requirements; and (3) retain qualified lower-tier vendors, in order to avoid serious programmatic disruptions, employee layoffs, and consequent additional costs. The committee recognizes that the lower the LRIP rate and the longer the LRIP duration prior to a decision to proceed to rate production, the more the total program costs will be increased. But the B-2 must demonstrate that its real-world capabilities—both its aerodynamic performance and its revolutionary low-observability features—are sufficiently outstanding to warrant its undeniably high cost.

In accordance with this philosophy, the committee approves as requested the proposed fiscal year 1990 research, development, test, and evaluation funding for the B-2, and reduces the fiscal year 1990 procurement request by $300 million. In section 133, the committee also introduces several restrictions on the use of this funding for the procurement of additional LRIP aircraft beyond the 8 production aircraft previously ordered.

First, no fiscal year 1990 funds may be obligated until first flight has occurred. Second, none of the fiscal year 1990 procurement funding may be obligated against the planned fiscal year 1990 aircraft buy until the initial "Block 1" flight test program has been completed. This initial series of flight tests covers over 80 percent of the aircraft's total speed and altitude envelope, and covers the operation of flight controls and major functional systems such as electrical systems, hydraulics, fuel management and transfer, landing gear, and environmental controls. This "Block 1" flight test program will also demonstrate aircraft handling qualities in pitch, roll and yaw maneuvers; engine operating characteristics; engine out and air restarts; air refueling; and basic aerodynamic flight characteristics to include standard flutter and vibration testing. Completion of this initial block of flight tests will significantly resolve questions about the B-2's aerodynamic performance.

Third, none of the procurement funds may be obligated against the planned fiscal year 1990 aircraft buy until the Defense Science Board has independently reviewed the results of the "Block 1" flight test program and reported to the Secretary of Defense on the flightworthiness of the B-2 aircraft and on the nature and significance of any deficiencies or discrepancies identified. In addition, the Director of Operational Test and Evaluation must evaluate the performance of the aircraft with respect to "Critical Operational Issues" and provide to the Secretary of Defense an "Early Operational Assessment." Before the funds can be obligated, the Secretary of Defense must certify to the Committees on Armed Services and Appropriations of the Senate and House of Representatives that no major aerodynamic or flightworthiness problems have been identified during the "Block 1" flight tests.

Fourth, before funding for additional aircraft can be obligated, the Secretary of Defense must also certify that the applicable performance milestones in the B-2 full performance matrix have been met, that cost reduction initiatives will be carried out, and that contractor quality assurance practices and fiscal management controls meet accepted government standards.

Fifth, no funds may be obligated against the planned fiscal year 1990 aircraft buy prior to the commencement of low-observables testing on developmental aircraft.

Sixth, not more than 25 percent of these procurement funds for the planned fiscal year 1990 aircraft buy may be expended prior to the receipt by the Committees on Armed Services and Appropriations of the Senate and House of Representatives of a classified report from the Low-Observables panel of the Defense Science Board reporting on the progress of such testing on the developmental aircraft.

Seventh, none of the fiscal year 1990 procurement funds may be obligated to purchase additional B-2 aircraft unless the Secretary of Defense certifies that the Air Force has included adequate funding in its current Five-Year Plan to increase production of B-2s to an efficient production rate once a decision is made to proceed to rate production. The committee is convinced that it is only through high-rate production that significant economies can be achieved in the estimated total production cost.

Finally, the committee indicates its strong concern about continued cost escalation by requiring an annual certification from the Secretary of Defense that the unit flyaway cost of the 132-aircraft B-2 program measured in constant 1990 dollars remains below $295 million. It is the committee's considered judgment that the flyaway costs must be kept below this ceiling in order to assure the affordability of the B-2 program. The committee notes that the Congress assumes an obligation under this provision to provide adequate funding for the production of B-2 aircraft once rate production is approved.

The committee does not authorize B-2 funding for fiscal year 1991 so as to review the progress in the program during the next year.

CORRECTION OF DEFICIENCIES CLAUSES IN B-2 PROCUREMENT CONTRACTS

In section 134, the committee requires the Secretary of Defense to submit two reports regarding correction of deficiencies clauses in B-2 procurement contracts.

F-15 AIRCRAFT

The administration has proposed to terminate procurement of the F-15 fighter after fiscal year 1991. While the committee understands that budgetary restrictions will necessitate termination of major programs, the committee also believes that it is essential that there be no fundamental problems with the A-12 follow-on aircraft before the F-15 production line is closed. Consequently, the committee directs the Secretary of Defense to provide a report at the time the fiscal year 1991 budget is submitted to the Congress on the technical progress of the A-12 aircraft, and to certify that there are no technical or performance problems that would delay introduction of the A-12 aircraft to the Air Force. On the basis of the Secretary's report, the committee will reassess the F-15 termination issue during consideration of the amended fiscal year 1991 budget request.

The committee also notes the Department of Defense's testimony on the "dubious survivability" of the F-15. The Secretary's report should indicate what steps are being taken to correct any survivability deficiencies in the F-15 aircraft.

C-17 AIRCRAFT PROCUREMENT

The administration requested authorization of $1,523.9 million in fiscal year 1990 for the procurement of 6 C-17 transport aircraft. The unit price for these aircraft is $254 million, and increase of $30 million over the 1989 buy of four aircraft. The committee does not believe adequate justification has been provided to support payment of a $180 million premium for a 50 percent increase in the number of aircraft procured.

The committee recommends authorization of $1,424.5 million in fiscal year 1990 for the procurement of six aircraft, a reduction of $99.4 million from the request.

The committee expresses a special interest in monitoring the progress of the C-17 program and receiving reports on significant changes, including, but not limited to, the achievement of milestones, delays in schedule, or major changes in design or assemblies. The committee directs the Secretary of Defense to report such events, on a timely basis, to the Senate and House Committee on Armed Services and Appropriations. Finally, the committee notes that differences exist between the Air Force and the Office of the Secretary of Defense on the estimated total cost of the program, and the committee expresses a special interest in monitoring further changes in these cost estimates.

C-17 TOOLING

The administration requested authorization of $2.0 billion in fiscal year 1991 for the procurement of 10 C-17 transport aircraft. Included in the request is $70 million for tooling to raise the production rate capability from 12 to 24 per year.

The unit cost of C-17 aircraft varies with the annual production rate: 12 per year yields a unit cost of $207 million; 24 per year yields a unit cost of $160 million; 29 per year yields a unit cost of $155.9 million. However, very significant increases in annual funding are required to reach a rate of 29 per year. The Air Force plans to procure C-17 aircraft at the rate of 29 per year starting in fiscal year 1993 and continuing through 1998, with annual funding requirements during the period ranging from $3.6 billion to $4.8 billion, varying with assumptions regarding multiyear procurement.

Historically, tooling has been purchased for unrealistic production rates since the services continually reduced the planned outyear buys as they cope with near-year budget realities. The Air Force noted in a report provided by the Defense Department on May 23, 1989, that tooling sufficient for production of 12 C-17 aircraft per year has already been procured. The next increment of tooling, a $70 million portion of the fiscal year 1991 request, will support production rates up to 24 aircraft per year. In the following fiscal year, 1992, $50 million will be requested for tooling to permit a production rate up to 29 per year.

The committee is concerned with the high degree of concurrency in the C-17 program, which makes a commitment to any particular level of production premature at this time. While supporting the administration's plan to acquire tooling permitting an increase of production of up to 24 aircraft per year, the committee cautions this support is subject to review of program progress over the next year. The committee has not yet decided whether production should exceed 24 per year in the absence of any compelling evidence that the Air Force would not reduce the outyear funding for the C-17. The committee believes the Air Force must carefully review its resource planning and commit to an affordable stable production rate for C-17 transport aircraft at the earliest time.

CIVIL AIR PATROL

The amended budget request includes $2 million to procure aircraft for the Civil Air Patrol. The committee believes that this request is insufficient to sustain modernization of the Civil Air Patrol. The committee recommends that an additional $500,000 be provided to procure used aircraft, $800,000 be provided to procure vehicles, and $500,000 to procure communications equipment appropriate for the Civil Air Patrol's requirements.

KC-135 RE-ENGINING

The committee recommends an increase of $140 million to re-engine up to an additional 16 KC-135 tanker aircraft. This would sustain an efficient manufacturing base for the re-engining program. The committee also recommends an undistributed reduction of $140.0 million, half in the Aircraft Procurement, Air Force account and half in the Missile Procurement, Air Force account. The committee directs the Air Force to identify program cuts to satisfy the undistributed reduction. The committee does not consider the additional KC-135 tanker re-enginings as "fenced", and the Air Force may apply the entire undistributed reduction against the additional tankers if no other funds are available.

CIVIL RESERVE AIR FLEET

The administration requested $0.9 million in fiscal year 1990 for modifications to enhance the Civil Reserve Air Fleet.

The committee notes this is a new program requiring an amendment to title 10, United States Code. The appropriate provision is included in the bill. Expanding the scope of this program will allow defense features to be incorporated in commercial aircraft at the time of their construction.

The committee recommends authorization of $0.9 million in fiscal year 1990 for the Civil Reserve Air Fleet modification program.

ADVANCED CRUISE MISSILE PROGRAM

Many of the details of the Advanced Cruise Missile (ACM) program, including its funding levels, are classified, so that broad congressional guidance has usually been confined to a classified annex to the report. Three years ago, the National Defense Authorization Act for Fiscal Year 1987 linked the obligation of procurement funds to the satisfactory completion of a set of developmental testing milestones. Those testing milestones have still not yet been successfully accomplished. Two years ago, the National Defense Authorization Act for Fiscal Years 1988 and 1989 further linked procurement to developmental milestones, and mandated the introduction of a second source for production of missiles. However, despite these incentives, the overall success of the flight test program hovers at about the 50 percent level, clearly an unacceptable rate for a major commitment to production.

This committee has been a strong supporter of the ACM program, based on the clear need to provide B-52s and, later, B-1Bs with an extended-range, low-observable cruise missile, allowing launch from a significant standoff range. However, the committee serves notice that its patience with this program, the Air Force, and the two contractors is exhausted. Accordingly, the committee recommended a provision (sec. 135) which provides that none of the fiscal year 1990 procurement funds may be obligated or expended until (a) the fiscal years 1987 and 1988 criteria are met and (b) until the Secretary of Defense certifies to the Committees on Armed Services and Appropriations of the Senate and House of Representatives that the overall success rate for ACM flight tests conducted after June 1, 1989, is significantly higher than 50 percent. The committee further serves notice that, if these conditions are not met prior to its consideration of the fiscal year 1991 defense budget request, the committee may well recommend termination of the ACM program and the initiation of a new design competition to develop a long-range, low-observables cruise missile. For these reasons, the committee does not authorize funds for fiscal year 1991 for the ACM for either procurement or research, development, testing and evaluation.

Additional guidance is contained in the classified annex to this report.

MAVERICK MISSILE

The Air Force and the Navy intend to terminate further procurement of the AGM-65D Maverick missile after fiscal year 1992. If terminated at this point, the Services will have acquired only a third of their inventory requirements. As noted above, the committee expresses its reservations over the wisdom of terminating the only anti-armor missile in production for the Navy and Air Force.

At present there are two producers of Maverick missiles. The Department of Defense invested substantial sums to establish two competitive producers because of the large inventory objective. The Department argued that an ongoing annual competition would produce savings over the life of the program.

The committee notes that the Air Force is proposing to conclude the acquisition of the Maverick missile under a multiyear contract for fiscal years 1990 through 1992. Each producer would submit a multiyear proposal, and the bidder with the lowest price would win 100 percent of the procurement quantity for the remaining three years of the program.

The committee believes this acquisition program must be reassessed. First, the committee questions whether the Maverick missile should be terminated at this point, falling far short of requirements and leaving a substantial gap in production until a follow-on antiarmor missile is in production. Second, the competition to date has generated significant savings. Competitive bids in the last three years might generate savings equal to or greater than the multiyear contract bids.

Consequently, the committee directs the Secretary of the Air Force to solicit two sets of bids from each competitor, one presuming annual competitions and one presuming a "winner take all" multiyear procurement. The Secretary should also solicit options for procurement beyond fiscal year 1992 should the assessment he has been directed to conduct indicate that the missile remain in production.

ADVANCED MEDIUM RANGE AIR TO AIR MISSILE (AMRAAM)

The amended budget request includes $902.9 million to procure 1,450 Advanced Medium Range Air to Air Missiles (AMRAAM). During the past year, the Air Force has experienced continuing difficulties with the missile, to include unexpected problems during captive carry tests. The General Accounting Office also highlighted a lack of stability in production design and in the software package.

The committee has long supported the AMRAAM missile and continues to do so. The committee questions whether the AMRAAM missile, which is continuing to experience growing pains in development, should be increased at the same time that the Air Force has proposed to cut production of the HARM missile to such low levels that the current competition is threatened. The committee recommends a reduction of $75 million for AMRAAM so that additional funds might be directed to the HARM missile.

MILSTAR

The President's National Space Program Report to Congress of March 14, 1989 indicates that the Air Force will not meet requirements for MILSTAR on-orbit satellites and spares due to "funding limits," even through the same report asserts that "MILSTAR will be the *only* means of meeting the Air Force commitment to the strategic force management task." In repeated testimony and budget justifications to the Congress, the Defense Department has shown clearly that MILSTAR is critical to strategic and conventional operations. The committee, therefore, does not accept "funding limits" as a sufficient rationale for not adhering to acknowledged requirements, particularly since the Air Force seeks expensive new space-based capabilities.

Accordingly, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services and Appropriations of the Senate and House of Representatives by February 1, 1990 describing the probabilities, and the assumptions and methodology used to compute the probabilities, that the currently planned MILSTAR constellation will provide required area coverage year-by-year through at least the year 2005; the difference between these probabilities and the required probabilities; and the impact of potential coverage gaps on specific forces and operations. In addition, the report is to include the amounts needed in each year to restore the required program, including launch-related costs.

LANDSAT LAUNCH FUNDING

Several years ago, the Air Force was asked to include extra Titan II space boosters in its plans to refurbish Titan ICBMs for space launch missions so that the Department of Commerce could launch its LANDSAT earth resources satellite. The Air Force complied with this request on the understanding that it would be reimbursed in increments in the years leading up to the launch of the LANDSAT satellite. No such reimbursement has occurred.

The committee recognizes that the entire LANDSAT program is under review by the National Space Council and that DoD may be directed to contribute additional funding for the program. Since LANDSAT is a civilian program, the committee regards DoD funding of LANDSAT as inappropriate and is disinclined to provide funds for DoD launches of LANDSAT satellites unless and until DoD is paid for the launch costs. The committee reserves judgment, however, until the Space Council has decided specifically whether the LANDSAT program should go forward and how it should be managed and funded. But the committee expects the Air Force to be reimbursed by the Department of Commerce for the cost of the Titan II space booster refurbished to launch the LANDSAT satellite. The committee also prohibits the use of DoD funds for the launch of LANDSAT 6 or for any other LANDSAT activity other than routine purchases of LANDSAT data and imagery, until a reprogramming request is first submitted to the appropriate committees.

AIR FORCE AMMUNITION

The committee recommends the following changes to the amended budget request for Air Force ammunition in fiscal year 1990:

1. 20mm training—a reduction of $3.594 million based on revised unit cost calculations;
2. 30mm training—a reduction of $3.848 million for this item based on anticipated contract savings;
3. 5.56mm—a reduction of $1 million based on prior year contract slippage; and
4. BDU-50 MK-82 bomb—an increase of $8.462 million for the procurement of 33,980 BDU-50 MK-82 bombs to reduce shortages in heavyweight training ordnance.

UNDISTRIBUTED REDUCTION TO VEHICLE REQUEST

The Air Force is in the process of decommissioning the ground launched cruise missile squadrons that have been banned by the INF treaty. The committee notes that several hundred million dollars worth of equipment and vehicles are in those squadrons. The committee believes that those resources can be redistributed to other Air Force units to lower procurement requirements in fiscal year 1990 for vehicles. Consequently, the committee recommends an undistributed reduction of $30 million to be applied against the Air Force request for vehicles in fiscal year 1990.

BOOST SURVEILLANCE AND TRACKING SYSTEM/DEFENSE SUPPORT PROGRAM

The Boost Surveillance and Tracking System (BSTS) is scheduled to enter full-scale engineering development next year. Despite this schedule, the Defense Department has yet to develop a comprehensive plan for the transition from the current Defense Support Program (DSP) system to BSTS. Accordingly, the committee directs the Secretary of Defense to submit a report no later than March 1, 1990, to the Committees on Armed Services and Appropriations of the Senate and House of Representatives, which provides the following information: (1) a detailed description, explanation, and justification of BSTS requirements for ballistic missile tactical warning/attack assessment and for Strategic Defense Initiative (SDI) missions; (2) specific plans, schedules, and funding requirements for procurement of additional DSP satellites until BSTS is fully operational, including any plans to upgrade DSP satellites or ground elements and plans for the size of the DSP constellation; and (3) the plans, schedule, and funding profile for development and procurement of BSTS, with and without SDI deployment, including the Department of Defense's position regarding SDI Organization or Air Force funding of BSTS development and procurement.

The committee recommends reducing the requested amount for DSP procurement by $28.3 million for fiscal year 1990. The committee's intent is to delay acquisition of satellites 23-25 by one year, based on the historical performance of DSP satellites and the improvements incorporated in the latest block change.

The committee also recommends a reduction of $20 million to the requested amount for DSP research, development, testing and evaluation for fiscal year 1990. This reduction is justified because $20 million was appropriated above the requested and authorized amount for fiscal year 1989 and remains available for obligation.

JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)

The committee is concerned that the Department of Defense has not emphasized sufficiently the introduction of the Joint Tactical Information Distribution System (JTIDS). Operational and campaign analysis indicates that JTIDS has tremendous potential in expanding the combat potential of tactical aircraft, yet the Air Force has programmed resources to install JTIDS terminals in only three wings of F-15 aircraft. The Air Force's commitment to JTIDS would seem to be inconsistent with the benefits JTIDS was designed to provide.

The committee is concerned that the Air Force's ambivalence toward JTIDS could threaten the Multifunction Information Distribution System (MIDS) program, which is a successor to JTIDS for use in NATO aircraft. The committee believes the Secretary of Defense should direct an operational evaluation of JTIDS on a squadron of F-15 aircraft as soon as possible. That evaluation should be made available to NATO countries participating in MIDS.

P-1		Bush Revised		-----Senate-----		-----Senate-----		Bush Revised		-----Senate-----		-----Senate-----	
		FY1990 Request		Change to Request		Authorization		FY 1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	DEFENSE AGENCIES PROCUREMENT CHANGES												
4	CLASSIFIED EQUIPMENT, NSA	[ ]	[ ]		[2,000]			[ ]	[ ]		[3,000]		
10	INTELLIGENCE AND COMMUNICATIONS, DIA	[ ]	[ ]		[-300]			[ ]	[ ]		[-1,000]		
25	ITEMS LESS THAN $2 MILLION, DSPO		394,087		(69,000)		325,087		351,131				--
999	CLASSIFIED PROGRAMS		548,614		1,700		550,314		634,267		2,000		636,267
	ASSET CAPITALIZATION PROGRAM				29,900		29,900				34,600		34,600
	TOTAL PROCUREMENT DEFENSE AGENCIES				(37,400)						36,600		
	DEFENSE AGENCIES PROCUREMENT DEFERRE												
25	ITEMS LESS THAN $2 MILLION, DSPO								351,131				--
	TOTAL DEFENSE AGENCIES DEFERRED										(351,131)		

PROCUREMENT FOR RESERVE COMPONENTS

The committee notes that the Army and Air National Guard, and the Army, Navy, Marine Corps and Air Force Reserves, form an essential team in the defense of the United States. The reserve components are an indispensible element of our total forces. Because of this special role, the committee decided to aggregate the procurement budget request for the reserve components from the procurement requests of the individual services into this single section.

The administration requested $1.4 billion in fiscal year 1990 and $2.0 billion in fiscal year 1991 for procurement of equipment for the reserve components. The committee notes that this level reflects a reduction compared to previous years. Consequently, the committee recommends not only the level requested in the budget ($1.4 billion) but also an increase of $391 million for the equipment needs of Guard and reserve units to offset existing equipment shortfalls. In addition, the committee transferred $164 million in fiscal year 1990 and $149 million in fiscal year 1991 from the operations and maintenance accounts to procurement for the reserve components as part of a comprehensive proposal to align the installation costs of modification kits with the procurement of those kits.

In summary, the committee recommends an authorization of $1.9 billion in fiscal year 1990 and $2.1 billion in fiscal year 1991 for the reserve components as delineated in the attached table.

The committee has approved these amounts for the reserve components in a separate measure that will be offered for the consideration of the Senate during its debate on the defense authorization bill.

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate----- Change to Request Quantity	-----Senate----- Change to Request Amount	-----Senate----- Authorization Quantity	-----Senate----- Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	-----Senate----- Change to Request Quantity	-----Senate----- Change to Request Amount	-----Senate----- Authorization Quantity	-----Senate----- Authorization Amount
	NATL GUARD & RESERVE EQUIPMENT, DEFENSE												
	ARMY RESERVE												
1	MISCELLANEOUS EQUIPMENT												
	5-TON TRUCK												
20	CH-47 CARGO HELICOPTER (MODS) (MYP)										41,400		41,400
23	UH-1 MODS				400		400				1,600		1,600
33	SPARES AND REPAIR PARTS				900		900				8,100		8,100
36	AVIONICS SUPPORT EQUIPMENT										11,200		11,200
37	COMMON GROUND EQUIPMENT				300		300				400		400
30	SNIPER WEAPON SYSTEM			21	100	21	100						
31	PERSONAL DEFENSE WEAPON, 9MM									169		169	
4	CTG, 5.56MM, ALL TYPES										5,400		5,400
17	CTG, .50 CAL, BALL, M33									417	400	417	400
23	CTG, 25MM, HEI-T, M792									9	200	9	200
26	CTG, 25MM, APFSDS-T, M919			6	500	6	500			7	400	7	400
75	PROJ, ARTY, 155MM, BASEBURNER M864			13	9,600	13	9,600			14	10,400	14	10,400
91	MINE, VOLCANO, AT/AP, M87			7	12,100	7	12,100			7	11,200	7	11,200
92	MINE, MICLIC, ROCKET MOTOR, MK22			356	1,400	356	1,400			310	1,200	310	1,200
93	MINE, MICLIC, LINE CHARGE, M58			187	2,000	187	2,000			149	1,500	149	1,500
94	MINE, MOPMS, AT/AP, M131			564	6,900	564	6,900			146	1,800	146	1,800
97	AT-4 MULTI-PURPOSE WEAPON			13	11,000	13	11,000						
107	DEMOLITION MUNITIONS, ALL TYPES										1,300		1,300
110	GRENADES, ALL TYPES										100		100
112	SIGNALS, ALL TYPES				500		500				1,300		1,300
116	ITEMS LESS THAN $2 MILLION				100		100						

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount
1	TACTICAL TRAILERS/DOLLY SETS				2,200		2,200				2,800		2,800
3	SEMITRAILER FB BB/CONT TRANS 22 1/2									75	1,300	75	1,300
9	SEMITRAILER, VAN, ASL, 10T									24	1,100	24	1,100
11	SMALL UNIT SUPPORT VEHICLE (SUSV)			55	8,100	55	8,100						
13	FAMILY OF MEDIUM TACTICAL VEH (MYP)									46	4,700	46	4,700
16	FAMILY OF HEAVY TACTICAL VEH (MYP)			10	3,900	10	3,900			32	9,600	32	9,600
26	SPARES AND REPAIR PARTS				4,200		4,200				600		600
41	SMALL UNIT TRANSCEIVER			173	300	173	300						
150	COMPUTER/INDICATOR, CP-696/PD			185	1,000	185	1,000			159	1,100	159	1,100
155	NAVSTAR USER EQUIPMENT										2,900		2,900
157	NIGHT VISION GOGGLES				100		100						
160	NIGHT VISION SIGHT INDIV WPN AN/PVS-			325	800	325	800						
161	RADIAC SET AN/VDR-2			39		39				975	1,100	975	1,100
179	DECONTAMINATE APP PWR DR LT WT M17									170	2,700	170	2,700
180	MASK, PROTECTIVE, NBC				4,000		4,000				16,500		16,500
182	CHEMICAL AGENT MONITOR			416	2,500	416	2,500			1,000	6,200	1,000	6,200
183	SIMP COLL PROT EQUIP M20			135	900	135	900			30	300	30	300
207	LAUNDRY UNIT/TRL MTD									24	1,900	24	1,900
213	TANK ASSEMBLY FAB COLLAPSIBLE POL 10			18	200	18	200			68	600	68	600
214	TANK ASSY, FAB COLLAPS, 20,000 GAL P									170	1,000	170	1,000
215	TANK/PUMP UNIT LIQ DISP F/TRK MOUNTI			82	700	82	700						
216	LABORATORY, PETROLEUM, SEMI-TRLR MTD									2	1,300	2	1,300
217	PUMP ASSY LIQ GAS WHL 4 IN OUT 350 G									262	2,600	262	2,600
220	WATER PURIF UNIT REV OS 3000 GPH			15	5,800	15	5,800						
223	TANK FABRIC COLL WTR 3000 GAL (ONION			223	400	223	400			140	200	140	200
224	WATER QUALITY ANALYSIS SET PURIF									11	100	11	100
225	ITEMS LESS THAN $2.0M (WATER EQ)				600		600				1,100		1,100
245	TRUCK, FORK LIFT, DE, PT, RT, 6000 L			170	12,900	170	12,900						
246	TRUCK, FORK LIFT, DE, PT, RT, 4000 L			62	2,900	62	2,900			154	7,300	154	7,300
249	SPARES AND REPAIR PARTS				3,100		3,100				10,900		10,900
	SUBTOTAL ARMY RESERVE		[100,400]		100,400		100,400		[175,800]		175,800		175,800

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount
	NAVY RESERVE												
2	MISCELLANEOUS EQUIPMENT												
3	SEABEE EQUIPMENT												
4	AN/SQR-17 ACOUSTIC PROCESSOR												
	C-130H AIRCRAFT												
	LAMPS MARK-1 ASW UPGRADE												
	HH-60 HELICOPTER UPGRADE												
	EA-6B AIRCRAFT												
	C-20 AIRCRAFT												
	SH-3H/SH-2G ASW MISSION DATA RECORDE												
	AN/SQQ58 SONOBUOYS				1,000		1,000						
	UNDISTRIBUTED REDUCTION				(1,000)		(1,000)						
5	SH-2 BLOCK UPGRADE												
6	P-3 MODIFICATIONS												
7	SH-3H MODIFICATIONS												
	INSTALLATION OF MODIFICATIONS				84,800		84,800				67,100		67,100
32	A-4 SERIES				2,500		2,500				2,500		2,500
33	A-6 SERIES				200		200				200		200
45	H-53 SERIES				600		600						
52	P-3 SERIES				10,400		10,400				7,300		7,300
59	CARGO/TRANSPORT A/C SERIES				1,500		1,500				1,600		1,600
62	POWER PLANT CHANGES				900		900				1,100		1,100
64	COMMON ECM EQUIPMENT				12,300		12,300				22,300		22,300
66	SPARES AND REPAIR PARTS				5,700		5,700				5,100		5,100
56	MK-15 CLOSE IN WEAPONS SYSTEM									2	7,200	2	7,200
57	MK-75 76MM GUN MOUNT				1,000		1,000				1,300		1,300

P-1		Bush Revised		-----Senate------		-----Senate------		Bush Revised		-----Senate------		-----Senate------	
		FY1990 Request		Change to Request		Authorization		FY 1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
32	SURFACE IMA										1,800		1,800
42	DIVING AND SALVAGE EQUIPMENT				200		200				200		200
46	SMALL BOATS				400		400				400		400
49	PRODUCTION SUPPORT FACILITIES				100		100				100		100
59	AN/SQQ-89 SURFACE ASW COMBAT SYS				4,700		4,700			1	25,400	1	25,400
71	LAMPS MK1 ASW SUPPORT				1,300		1,300						
133	SHIP COMM ITEMS UNDER $2.0 MILLION				3,000		3,000				3,200		3,200
172	CRYPTOLOGIC RESERVES EQUIPMENT				600		600				400		400
175	WAR RESERVE				600		600				400		400
240	EXPLOSIVE ORDNANCE DISPOSAL EQUIP				2,000		2,000				2,200		2,200
257	PASSENGER CARRYING VEHICLES			30	500	30	500			25	400	25	400
258	TRUCKS & TRAILERS				1,000		1,000				1,100		1,100
262	TRAILERS/TRUCK TRACTORS				700		700				1,200		1,200
265	EARTH MOVING EQUIPMENT			14	500	14	500			11	600	11	600
267	MISC CONSTRUCTION AND MAINTENANCE EQ				200		200				700		700
268	FIRE FIGHTING EQUIPMENT			3	200	3	200						
269	WEIGHT HANDLING EQUIPMENT									2	1,000	2	1,000
271	COMBAT CONSTRUCTION SUPPORT EQUIPMEN				1,600		1,600				1,800		1,800
278	FORKLIFT TRUCKS				1,200		1,200				1,300		1,300
279	OTHER MATERIALS HANDLING EQUIPMENT				500		500				100		100
300	COMPUTER ACQUISITION PROGRAM				1,000		1,000				900		900
297	NAVAL RESERVE SUPPORT EQUIPMENT				3,800		3,800				800		800
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	SUBTOTAL NAVY RESERVE		[59,200]		144,000		144,000		[92,600]		159,700		159,700

P-1		Bush Revised		-----Senate------		-----Senate------		Bush Revised		-----Senate------		-----Senate------	
		FY1990 Request		Change to Request		Authorization		FY 1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	MARINE CORPS RESERVE												
8	MISCELLANEOUS EQUIPMENT												
9	KC-130T AIRCRAFT												
	AH-1W COBRA AIRCRAFT												
10	TACT AIR OPERATIONS MODULE (TAOM)												
	INSTALLATION OF MODIFICATIONS				25,700		25,700				25,900		25,900
42	AAV7A1 PIP				700		700				2,400		2,400
44	M-1 A1 MAIN BATTLE TANK (MYP)									88	267,000	88	267,000
63	MANPACK RADIOS AND EQUIP				800		800						
66	UNIT LEVEL CIRCUIT SWITCH (ULCS)				17,600		17,600				12,900		12,900
69	SWEEP GENERATOR										1,600		1,600
79	TACTICAL AIR OPER MODULE (TAOM)									2	12,800	2	12,800
82	LEWOD									10	2,000	10	2,000
87	AN/USM-489 SPECTRUM ANALYZER, PORTAB			19	700	19	700						
97	MODIFICATION KITS (NONTEL)										700		700
98	ITEMS LESS THAN $2M (NON-TEL)				100		100						
102	M876 TRUCK,MAINTENANCE,TELEPHONE/UTI									6	1,100	6	1,100
108	ENVIRONMENTAL CONTROL EQUIP ASSORT										800		800
120	TOPOGRAPHIC/SURVEY EQUIPMENT										700		700
118	AMPHIBIOUS ASSAULT FUEL SYSTEM										200		200
122	POWER EQUIPMENT ASSORTED										2,200		2,200
131	LIGHTWEIGHT DECONTAMINATION SYSTEM										1,200		1,200
132	DRY CHEMICAL FIRE EXTINGUISHER			50	500	50	500			46	500	46	500
136	SHELTER FAMILY				3,100		3,100				3,900		3,900
137	CONTAINER FAMILY				1,700		1,700				2,100		2,100
139	MODIFICATION KITS										100		100
140	ITEMS LESS THAN $2 MIL				200		200				100		100
141	SPARES AND REPAIR PARTS				2,700		2,700				2,800		2,800
	SUBTOTAL MARINE CORPS RESERVE		[28,100]		53,800		53,800		[315,100]		341,000		341,000

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY 1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	AIR FORCE RESERVE												
11	MISCELLANEOUS EQUIPMENT												
12	C-130H AIRCRAFT												
13	IMPROVED WEATHER RECON SYSTEM												
14	MH-60G HELO												
15	C-5A SIMULATOR												
16	KC-135 MODIFICATIONS												
	F-16 IMPROVEMENT PACKAGE												
27	A-10				9,500		9,500				3,800		3,800
28	F/RF-4				2,400		2,400				1,700		1,700
31	F-16				2,100		2,100				6,600		6,600
35	C-5				20,600		20,600				20,400		20,400
39	C-141				900		900				1,300		1,300
48	C-130				17,900		17,900				20,000		20,000
50	C-135 (MYP)				1,600		1,600				1,600		1,600
55	H-3 AIRCRAFT SYSTEM				300		300				200		200
59	OTHER AIRCRAFT				6,600		6,600				4,400		4,400
64	SPARES AND REPAIR PARTS				80,900		80,900				86,600		86,600
70	COMMON GROUND EQUIP				5,900		5,900				4,900		4,900
6	5.56 MM			329		329				329		329	
7	20 MM COMBAT			553	2,500	553	2,500			553	2,500	553	2,500
8	20MM TRAINING			876	2,100	876	2,100			876	2,200	876	2,200
9	30 MM TRAINING			1,297	10,800	1,297	10,800			1,308	10,900	1,308	10,900
10	40MM TP GRENADES									24		24	
13	SIGNAL MK-4 MOD 3			75	100	75	100			72	100	72	100
18	MK-82 INERT/BDU-50									2,998	900	2,998	900
25	BOMB PRACTICE 25 POUND			98	1,600	98	1,600			98	1,500	98	1,500
34	FLARE, IR MJU-7B			28	400	28	400			28	400	28	400
35	PARACHUTE FLARE LUU-2 B/B			246	100	246	100			246	100	246	100
40	ITEMS LESS THAN $2,000,000				200		200				300		300
41	FMU-139			995	900	995	900			995	1,000	995	1,000
47	SEDAN, 4 DR 4X2			23	200	23	200			3		3	

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount
48	STATION WAGON, 4X2			6		6				2		2	
49	BUS, 28 PASSENGER			1		1							
51	BUS, 44 PASSENGER			1		1							
55	LAW ENFORCEMENT VEHICLE			1		1				1		1	
56	TRUCK, STAKE/PLATFORM			3		3				12	100	12	100
57	TRUCK, CARGO-UTILITY, 3/4T, 4X4			10	200	10	200			17	300	17	300
58	TRUCK, CARGO-UTILITY, 1/2T, 4X2			6	100	6	100			4	100	4	100
59	TRUCK, PICKUP, 1/2T, 4X2			7	100	7	100			6		6	
61	TRUCK MULTI-STOP 1 TON 4X2			18	300	18	300			16	300	16	300
63	TRUCK CARRYALL			77	100	77	100			4		4	
68	TRUCK TRACTOR, OVER 5T			2	100	2	100			1	100	1	100
69	TRUCK, DUMP 5 TON			[illegible]	200	5	200			4	100	4	100
72	ITEMS LESS THAN $2,000,000				300		300				100		100
76	TRUCK TANK FUEL R-11(R-9)			8	800	8	800						
80	TRACTOR, TOW, FLIGHTLINE									27	500	27	500
85	ITEMS LESS THAN $2,000,000				900		900						
92	TRUCK F/L 4000 LB GED/DED 144 INCH									1		1	
94	TRUCK, F/L 10,000 LB			5	200	5	200			4	300	4	300
100	LOADER, SCOOP									7	400	7	400
102	CLEANER, RUNWAY/STREET			1	100	1	100			1	100	1	100
107	ITEMS LESS THAN $2,000,000				100		100				100		100
193	ITEMS LESS THAN $2,000,000				300		300				200		200
196	NIGHT VISION GOGGLES-SOF			24	300	24	300			24	300	24	300
197	CHEMICAL/BIOLOGICAL DEF PROG			3	2,200	3	2,200			3	2,500	3	2,500
198	ITEMS LESS THAN $2,000,000				400		400				200		200
201	ITEMS LESS THAN $2,000,000				300		300				100		100
202	GENERATORS-MOBILE ELECTRIC				2,600		2,600				600		600
204	ITEMS LESS THAN $2,000,000										200		200
205	BASE PROCURED EQUIPMENT				200		200				300		300
206	MEDICAL/DENTAL EQUIPMENT				100		100				100		100
208	PALLET, AIR CARGO, 108"X88"			24		24				25		25	
217	ITEMS LESS THAN $2,000,000				400		400				800		800
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	SUBTOTAL AIR FORCE RESERVE		[177,900]		177,900		177,900		[179,200]		179,200		179,200

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount
	NATIONAL GUARD EQUIPMENT												
	ARMY NATIONAL GUARD												
17	MISCELLANEOUS EQUIPMENT												
18	SMALL UNIT SUPPORT VEHICLE (SUSV)												
19	M113 APR/M577 COMMAND VEHICLES			300	91,000	300	91,000						
	M113 A-2 TO A-3 UPGRADE				10,000		10,000						
20	M109 HOWITZER CANNON REPLACEMENT												
21	C-23 AIRCRAFT			4	28,000	4	28,000						
22	FIRE SUPPORT TEAM VEHICLES												
	MULTIPLE LAUNCH ROCKET SYSTEM												
	5-TON TRUCKS/TRUCK REBUILD												
	CH-47D HELICOPTER												
23	M-1A1 ABRAMS TANK (MYP)												
11	UH-60 BLACKHAWK (MYP)				71,600		71,600				98,500		98,500
12	UH-60 ADVANCE PROCUREMENT (CY)				80,100		80,100						
20	CH-47 CARGO HELICOPTER (MODS) (MYP)										149,000		149,000
23	UH-1 MODS				1,400		1,400				5,100		5,100
33	SPARES AND REPAIR PARTS				1,300		1,300				12,000		12,000
36	AVIONICS SUPPORT EQUIPMENT										10,900		10,900
37	COMMON GROUND EQUIPMENT				700		700				400		400
30	SNIPER WEAPON SYSTEM			377	1,400	377	1,400						
31	PERSONAL DEFENSE WEAPON, 9MM									1,843	400	1,843	400
4	CTG, 5.56MM, ALL TYPES										3,000		3,000
22	CTG, 20MM, MPT-SD, M940									156	2,500	156	2,500
23	CTG, 25MM, HEI-T, M792									154	3,200	164	3,200
26	CTG, 25MM, APFSDS-T, M919			96	8,500	96	8,500			121	6,500	121	6,500
75	PROJ, ARTY, 155MM, BASEBURNER M864			63	46,900	63	46,900			65	48,600	65	48,600
91	MINE, VOLCANO, AT/AP, M87			11	18,900	11	18,900			11	17,500	11	17,500
92	MINE, MICLIC, ROCKET MOTOR, MK22			534	2,100	534	2,100			465	1,800	465	1,800
93	MINE, MICLIC, LINE CHARGE, M58			281	3,000	281	3,000			224	2,300	224	2,300

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
94	MINE, MOPMS, AT/AP, M131			847	10,300	847	10,300			220	2,600	220	2,600
97	AT-4 MULTI-PURPOSE WEAPON			20	17,000	20	17,000						
107	DEMOLITION MUNITIONS, ALL TYPES										1,900		1,900
110	GRENADES, ALL TYPES										200		200
112	SIGNALS, ALL TYPES				700		700				1,900		1,900
116	ITEMS LESS THAN $2 MILLION				100		100						
1	TACTICAL TRAILERS/DOLLY SETS				1,900		1,900				5,400		5,400
3	SEMITRAILER FB BB/CONT TRANS 22 1/2									40	700	40	700
9	SEMITRAILER, VAN, ASL, 10T									32	1,400	32	1,400
11	SMALL UNIT SUPPORT VEHICLE (SUSV)			22	3,300	22	3,300						
13	FAMILY OF MEDIUM TACTICAL VEH (MYP)									36	3,300	36	3,300
16	FAMILY OF HEAVY TACTICAL VEH (MYP)			52	20,100	52	20,100			176	52,700	176	52,700
17	TRUCK, TRACTOR, LINE HAUL, M915A1			96	7,600	96	7,600						
26	SPARES AND REPAIR PARTS				12,000		12,000				19,100		19,100
34	SINCGARS FAMILY				9,100		9,100						
41	SMALL UNIT TRANSCEIVER			1,517	2,500	1,517	2,500						
150	COMPUTER/INDICATOR, CP-696/PD			140	800	140	800			107	700	107	700
155	NAVSTAR USER EQUIPMENT										5,800		5,800
157	NIGHT VISION GOGGLES				13,300		13,300				10,700		10.700
160	NIGHT VISION SIGHT INDIV WPN AN/PVS-			4,558	11,600	4,558	11,600						
161	RADIAC SET AN/VDR-2			5		5				1,347	1,600	1,347	1,600
179	DECONTAMINATE APP PWR DR LT WT M17									252	3,900	252	3,900
180	MASK, PROTECTIVE, NBC				6,300		6,300				23,300		23,300
181	MASK, ACFT			54	700	54	700						
182	CHEMICAL AGENT MONITOR			295	1,800	295	1,800			666	4,100	666	4,100
183	SIMP COLL PROT EQUIP M20			161	1,100	161	1,100			97	900	97	900
207	LAUNDRY UNIT/TRL MTD									7	600	7	600
213	TANK ASSEMBLY FAB COLLAPSIBLE POL 10			24	200	24	200			12	100	12	100
214	TANK ASSY, FAB COLLAPS, 20,000 GAL P									156	900	156	900

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
215	TANK/PUMP UNIT LIQ DISP F/TRK MOUNTI			64	600	64	600						
217	PUMP ASSY LIQ GAS WHL 4 IN OUT 350 G									136	1,300	136	1,300
223	TANK FABRIC COLL WTR 3000 GAL (ONION			52	100	52	100			348	600	348	600
224	WATER QUALITY ANALYSIS SET PURIF									84	800	84	800
225	ITEMS LESS THAN $2.0M (WATER EQ)				400		400				300		300
245	TRUCK, FORK LIFT, DE, PT, RT, 6000 L			70	5,300	70	5,300			82	6,300	82	6,300
246	TRUCK, FORK LIFT, DE, PT, RT, 4000 L			19	900	19	900			66	3,100	66	3,100
247	65 TON CRANE												
249	SPARES AND REPAIR PARTS				13,500		13,500				5,500		5,500
	SUBTOTAL ARMY NATIONAL GUARD		[387,100]		506,100		506,100		[521,400]		521,400		521,400

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY 1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
	AIR NATIONAL GUARD												
24	MISCELLANEOUS EQUIPMENT												
25	C-130 AIRCRAFT			10	218,000	10	218,000						
26	MH-60G HELICOPTERS												
27	HC-130 AIRCRAFT			1	43,000	1	43,000						
28	F-16A/B MSIP												
29	ACMI NORTH TIER FLIGHT PH II												
	F-15/F-16 IMPROVEMENT PACKAGE												
	C-26 AIRCRAFT												
30	KC-135 AIRCRAFT												
	INSTALLATION OF MODIFICATIONS				53,300		53,300				56,100		56,100
26	A-7				52,800		52,800				22,500		22,500
27	A-10				11,400		11,400				4,500		4,500
28	F/RF-4				35,200		35,200				45,200		45,200
30	F-15				5,500		5,500				9,300		9,300
31	F-16				8,600		8,600				29,200		29,200
35	C-5				7,700		7,700				7,700		7,700
39	C-141				900		900				1,300		1,300
48	C-130				24,700		24,700				27,800		27,800
49	SOF C130				11,700		11,700				10,500		10,500
50	C-135 (MYP)				6,400		6,400				6,500		6,500
44	C-12				300		300				200		200
55	N-3 AIRCRAFT SYSTEM				200		200				100		100
59	OTHER AIRCRAFT				22,700		22,700				14,800		14,800
64	SPARES AND REPAIR PARTS				300,700		300,700				327,900		327,900
70	COMMON GROUND EQUIP				56,100		56,100				14,800		14,800

P-1 LINE	ITEM	Bush Revised FY1990 Request		-----Senate------ Change to Request		-----Senate------ Authorization		Bush Revised FY 1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
1	2.75 INCH ROCKET MOTOR			16,000	3,700	16,000	3,700			16,000	3,700	16,000	3,700
2	2.75 INCH ROCKET HEAD - WP			9,832	700	9,832	700			9,919	800	9,919	800
4	ITEMS LESS THAN $2,000,000				1,900		1,900				1,900		1,900
6	5.56 MM			1,840	300	1,840	300			1,888	300	1,888	300
7	20 MM COMBAT			21	100	21	100			21	100	21	100
8	20MM TRAINING			2,994	8,100	2,994	8,100			2,994	8,600	2,994	8,600
9	30 MM TRAINING			953	7,900	953	7,900			953	7,900	953	7,900
10	40MM TP GRENADES									87	100	87	100
13	SIGNAL MK-4 MOD 3			518	600	518	600			519	600	519	600
14	MXU-4A/A ENGINE STARTER									2	300	2	300
16	ITEM LESS THAN 2.0M CARTRIDGES-SOF				500		500				700		700
18	MK-82 INERT/BDU-50									8,275	2,400	8,275	2,400
20	BSU-49 INFLATABLE RETARDER			9,520	3,600	9,520	3,600			9,520	3,600	9,520	3,600
25	BOMB PRACTICE 25 POUND			294	5,000	294	5,000			294	4,600	294	4,600
34	FLARE, IR MJU-7B			66	1,000	66	1,000			66	1,000	66	1,000
35	PARACHUTE FLARE LUU-2 B/B			310	100	310	100			310	100	310	100
40	ITEMS LESS THAN $2,000,000				800		800				900		900
41	FMU-139			1,990	1,900	1,990	1,900			1,990	2,000	1,990	2,000
42	ITEMS LESS THAN $2,000,000				200		200				200		200
47	SEDAN, 4 DR 4X2									10	100	10	100
48	STATION WAGON, 4X2									11	100	11	100
49	BUS, 28 PASSENGER			8	300	8	300			2	100	2	100
51	BUS, 44 PASSENGER			4	200	4	200			3	100	3	100
53	MODULAR AMBULANCE			4	200	4	200						
55	LAW ENFORCEMENT VEHICLE			1		1				4		4	
56	TRUCK, STAKE/PLATFORM			6	100	6	100			10	100	10	100
57	TRUCK, CARGO-UTILITY, 3/4T, 4X4			30	500	30	500			15	300	15	300
58	TRUCK, CARGO-UTILITY, 1/2T, 4X2			17	200	17	200			24	400	24	400
59	TRUCK, PICKUP, 1/2T, 4X2			36	300	36	300			42	300	42	300
61	TRUCK MULTI-STOP 1 TON 4X2			29	500	29	500			26	400	26	400
63	TRUCK CARRYALL			11	200	11	200			13	100	13	100
68	TRUCK TRACTOR, OVER 5T												

P-1 LINE	ITEM	Bush Revised FY1990 Request Quantity	Bush Revised FY1990 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount	Bush Revised FY 1991 Request Quantity	Bush Revised FY 1991 Request Amount	-----Senate------ Change to Request Quantity	-----Senate------ Change to Request Amount	-----Senate------ Authorization Quantity	-----Senate------ Authorization Amount
69	TRUCK, DUMP 5 TON			4	200	4	200			8	300	8	300
72	ITEMS LESS THAN $2,000,000				900		900				1,000		1,000
76	TRUCK TANK FUEL R-11(R-9)			70	6,700	70	6,700						
79	TRACTOR, A/C TOW, MB-4									5	100	5	100
80	TRACTOR, TOW, FLIGHTLINE									30	600	30	600
85	ITEMS LESS THAN $2,000,000				600		600				1,000		1,000
89	TRUCK PUMPER P-24(P-8)			1	100	1	100						
90	TRUCK PUMPER P-22(P-12)			3	300	3	300			1	100	1	100
91	ITEMS LESS THAN $2,000,000				100		100				500		500
92	TRUCK F/L 4000 LB GED/DED 144 INCH			9	200	9	200			13	200	13	200
93	TRUCK, F/L 6000 LB			5	200	5	200			3	100	3	100
94	TRUCK, F/L 10,000 LB			3	100	3	100			10	600	10	600
100	LOADER, SCOOP			5	300	5	300						
102	CLEANER, RUNWAY/STREET			13	1,200	13	1,200			33	2,800	33	2,800
103	CRANE, 7-50 TON			1	100	1	100						
107	ITEMS LESS THAN $2,000,000				1,200		1,200				1,700		1,700
121	TACTICAL AIR CONTROL SYS IMPROVE										105,300		105,300
177	TACTICAL C-E EQUIPMENT				2,200		2,200				2,300		2,300
187	COMM-ELECTRONICS CLASS IV				5,100		5,100				5,300		5,300
193	ITEMS LESS THAN $2,000,000				1,300		1,300				300		300
196	NIGHT VISION GOGGLES-SOF			20	200	20	200			20	200	20	200
197	CHEMICAL/BIOLOGICAL DEF PROG			4	3,600	4	3,600			4	1,800	4	1,800
198	ITEMS LESS THAN $2,000,000				200		200				700		700
201	ITEMS LESS THAN $2,000,000				1,100		1,100				200		200
202	GENERATORS-MOBILE ELECTRIC				11,300		11,300				2,900		2,900
204	ITEMS LESS THAN $2,000,000				300		300				1,000		1,000
205	BASE PROCURED EQUIPMENT				2,400		2,400				3,000		3,000
206	MEDICAL/DENTAL EQUIPMENT				300		300				300		300
208	PALLET, AIR CARGO, 108"X88"			54	100	54	100			(100)	100	(100)	100
217	ITEMS LESS THAN $2,000,000				2,800		2,800				1,300		1,300
	SUBTOTAL AIR NATIONAL GUARD		[626,900]		941,200		941,200		[697,800]		753,900		753,900
	TOTAL GUARD AND RESERVE		[1,379,600]		1,923,400		1,923,400		[1,981,900]		2,131,000		2,131,000

C-130 SIMULATOR TRAINING FACILITY

The Department of Defense Appropriations Act for fiscal year 1989 directed the National Guard Bureau to establish two facilities to train reserve component C-130 pilots. The Act directed that one facility be established east of the Mississippi River and one be established west of the river. The National Guard Bureau selected Minneapolis-St. Paul as the location for the western region training center. While the committee supports the concept of a single training facility in the western region, the committee wants to insure that full attention was given to the criteria for selecting the location. The committee directs the Director of the Air National Guard to report, not later than 45 days after enactment of this act, on the criteria established for location selection and basis for the final selection.

CHEMICAL DEFENSIVE EQUIPMENT

The amended defense budget request for fiscal years 1990 and 1991 added $29 million to the original budget request for accelerating the removal of chemical weapons from Germany. At the same time that withdrawal of chemical deterrent weapons is being accelerated, the administration plan is to reduce the procurement rate and funding for Air Force chemical defense equipment. The amended defense budget request would reduce funding for Air Force procurement of the Chemical Survival Collective Protection System by $14 million in fiscal year 1990 and $25 million in fiscal year 1991. In hearings this year, the Defense Department testified that without this equipment "Air Force bases cannot sustain operations in a chemical environment." The committee does not believe that reducing funds for essential defensive capabilities is an appropriate action when in-place deterrent forces are being withdrawn. The committee, therefore, recommends restoring $14 million in fiscal year 1990 and $25 million in fiscal year 1991.

For over a decade, the Army's operational doctrine has emphasized the necessity to prepare for combat in conditions of chemical, biological, and radiological contamination. In the last several years, it has become apparent that the chemical threat to U.S. and allied forces in a variety of contingencies is credible and growing. As noted above, the United States recently announced that it would explore the possibility of accelerating the withdrawal and demilitarization of aging chemical deterrent systems deployed abroad. Without an in-place deterrent, the importance of defense capabilities will increase substantially. Since the early 1980s, the Army has funded defense equipment research and development at steadily increasing levels. In the aggregate, these R&D expenditures have far outstripped the actual procurement of defensive equipment, which remains at low levels. The Army appears to be at the point where improved systems and capabilities can be fielded. The Army's five-year plan does include substantial procurement funding; the committee expresses its support for these plans and urges the Army to adhere to them.

CHEMICAL MASK IMPROVED DRINKING SYSTEM

In the National Defense Authorization Act for Fiscal Years 1988 and 1989 (Pub. L. 100–180), Congress authorized $600,000 for the Army to conduct an operational test and evaluation of the Chemical Mask Improved Drinking System (CMIDS). The committee is encouraged to learn that Army tests conducted to date on this nondevelopmental item (NDI) have shown that with some minor material adjustments, the CMIDS should be fully compatible with the new M40/42 gas mask and the two-quart flexible canteen issued to certain special units of the Army and could provide a significant improvement in convenience and practiality over the present gravity system for fluid intake while wearing chemical protective masks. The tests have also revealed problems with the CMIDS when used in conjunction with the Army's standard-issue rigid one-quart canteen.

The committee directs the Army to allow the manufacturer of this NDI to make such minor material adjustments as needed to complete, for purposes of type classification of this system, operational test and evaluation of the CMIDS with the flexible two-quart canteen within the available funds previously authorized for such tests by Pub. L. 100–180. The committee also directs the Army to continue evaluation of options for using the CMIDS in conjunction with one-quart canteens, including its effectiveness when mated to a flexible one-quart canteen or to the standard-issue rigid one-quart canteen modified with a collapsible inner liner.

The committee recommends an authorization of $1 million which shall be available only for the procurement of the CMIDS for issuance along with other chemical protective gear to users of the flexible two-quart canteen. However, these funds may not be obligated unless the Secretary of the Army, based on operational test results of the system as modified with the minor material adjustments noted above, certifies to the Committees on Armed Services and Appropriations of the Senate and House of Representatives that the CMIDS: (a) is compatible with the M40/42 gas mask and the flexible two-quart canteen; and (b) provides an improvement in convenience and practicality over the present gravity system for fluid intake by troops wearing chemical protective masks.

MULTIYEAR CONTRACT AUTHORIZATION

The administration requested authority to enter into multiyear contracts for numerous programs in fiscal years 1990 through 1994. Because of the potential changes in future budgets, the committee considered only those programs for which the Department of Defense proposes to initiate multiyear contracts in fiscal years 1990 and 1991.

The committee recommends a provision (sec. 106) authorizing the military departments to enter into multiyear contracts pursuant to section 2306(h) of title 10, United States Code, for the following programs:

M1 tank
M2 fighting vehicle
MH–47
Family of Heavy Tactical Vehicles

E-2C aircraft
F/A-18 aircraft
Mk-45 Gun Mount/Mk-6 Ammunition Hoist
AGM-65D missile

The committee denies a multiyear contract authorization for the following programs:

DDG-51 destroyer program
SH-60B/F helicopter programs

The committee emphasizes its support of multiyear contracts and believes the stability that they offer is sufficient to justify 10 percent cost savings compared to annual contracts.

In previous years, the Congress has required that programs funded on a multiyear basis project at least a 12 percent savings compared to those funded on an annual basis. The Department of Defense has suggested that this requirement is too stringent and that multiyear program candidates be considered on a case-by-case basis with no regard to a projected dollar savings. Such a change at this time would not permit the level of congressional oversight to ensure that public funds are expended in the most efficient manner. However, to encourage greater use of multiyear procurements, while anticipating a reasonable projection of dollar savings and enhancing congressional oversight, section 106 specifies 10 percent savings compared to 12 percent savings required in previous years.

TITLE II—RESEARCH, DEVELOPMENT, TEST AND EVALUATION

The recommendations of the committee for the research, development, test and evaluation of various defense weapons and equipment appear in the following pages.

EXPLANATION OF TABLES

The tables in this title display items requested by the administration for fiscal years 1990 and 1991 in which the committee either increased or decreased the requested amounts. Items that are not displayed have been approved by the committee in the fiscal year 1990 and 1991 amounts requested in the Department of Defense's amended budget justification documents. As in the past, the administration may not exceed the amounts approved by the committee (as set forth in the tables or, if unchanged from the administration's request, as set forth in the Defense Department's budget justification documents), without an appropriate reprogramming action in accordance with established procedures.

UNDISTRIBUTED REDUCTIONS

Any undistributed reductions shown in these tables are made without prejudice to any particular programs, but are not to apply to any programs for which the committee has made recommendations for programmatic or funding increases.

R-1 Line	PE	Program	Revised FY 1990 Request	Senate Change to Request	Senate Authorized
		CHANGES TO ARMY RDT&E			
6	62122A	SURVIVABILITY ENHANCEMENT	5,949	20,000	25,949
30	63004A	WEAPONS AND MUNITIONS ADVANCED TECH	48,774	59,900	108,674
31	63005A	COMBAT VEHICLE AND AUTOMOTIVE ADV TECH	158,047	(70,000)	88,047
35	63012A	TRACTOR HOLE	9,193	4,800	13,993
55a		CHEMICAL WEAPONS CONVENTION COMPL MONITO		15,000	15,000
65	63706A	IDENTIFICATION-FRIEND-OR-FOE - ADV DEV		14,200	14,200
73	63757A	FORWARD AREA AIR DEFENSE (FAAD) SYSTEM	40,210	79,000	119,210
115	64754A	CLASSIFIED PROGRAM - ENG DEV	[ ]	[-59,300]	
120	64802A	WEAPONS AND MUNITIONS - ENG DEV	16,364	5,000	21,364
126	64808A	LANDMINE WARFARE/BARRIER - ENG DEV	9,802	12,900	22,702
127	64810A	FIBER OPTIC GUIDED MISSILE - ENG DEV	139,366	15,000	154,366
131	64815A	TRACTOR TRAILER	4,927	(4,927)	
140	23735A	COMBAT VEHICLE IMPROVEMENT PROGRAMS	73,216	20,000	93,216
151	23809A	DRAGON III		(5,480)	(5,480)
		SOLDIER/MARINE ENHANCEMENT PROGRAM(ARMY)		18,000	18,000
		PRIOR YEAR SAVINGS-MAXICUBE CARGO		(10,000)	(10,000)
		PRIOR YEAR SAVINGS-FLUIDTRONICS		(5,000)	(5,000)
		PRIOR YEAR SAVINGS-VEHICLE INTERCOM SYST		(10,000)	(10,000)
		TACTICAL CLASSIFIED	567,311	(59,300)	508,011
156	64716A	TERRAIN INFORMATION - ENG DEV	12,921	(5,000)	7,921
158	31359A	SPECIAL ARMY PROGRAM	[ ]	[-500]	
161		INTEL/COMMUNICATIONS CLASSIFIED	26,025	(500)	25,525
		KWAJALEIN MISSILE RANGE SECURITY		7,500	7,500
		UNDISTRIBUTED REDUCTION		(2,500)	(2,500)
163	65601A	ARMY TEST RANGES AND FACILITIES	226,929	(6,000)	220,929
165	65603A	ARMY USER TEST INSTRUMENT & THREAT SIM	64,805	(4,500)	60,305
169	65709A	EXPLOITATION OF FOREIGN ITEMS	[ ]	(6,500)	(6,500)
170	65712A	SUPPORT OF OPERATIONAL TESTING	70,869	(6,000)	64,869
171	65801A	PROGRAMWIDE ACTIVITIES	89,434	(3,000)	86,434
175	65810A	RDT&E SUPPORT FOR NONDEVELOPMENTAL ITEMS	7,534	2,466	10,000
		TOTAL, RDT&E ARMY		75,059	

R-1 Line	PE	Program	Revised FY 1991 Request	Senate Change to Request	Senate Authorized
		CHANGES TO FY1991 ARMY RDT&E			
175	65810A	RDT&E SUPPORT FOR NONDEVELOPMENTAL ITEMS	7,648	3,000	10,648
180	78011A	INDUSTRIAL PREPAREDNESS	36,085	4,000	40,085
		AUTHORIZATION CHANGES ARMY		7,000	
		FY1991 ARMY R&D PROGRAMS DEFERRED			
54	12814A	SPECIAL PROGRAMS	[ ]		--
55	33152A	WORLD-WIDE MILITARY COMMAND AND CONTROL	[ ]		--
	63392A	ANTI-SATELLITE SYSTEM (ASAT)	124,281		--
		STRATEGIC CLASSIFIED	56,158		--
58	63604A	NUCLEAR MUNITIONS AND RADIACS -ADV DEV	[ ]		--
96	64603A	NUCLEAR MUNITIONS AND RADIAC - ENG DEV	[ ]		--
137	64821A	FOLLOW-ON LANCE	128,649		--
		TACTICAL CLASSIFIED	640,604		632,728
		TOTAL ARMY R&D DEFERRED		(316,964)	

HEAVY FORCES MODERNIZATION

The Army has proposed a comprehensive and ambitious plan to build a new generation of armored combat vehicles called Heavy Forces Modernization (HFM). The future vehicles would all utilize a common chassis in order to minimize future operating and support costs. In all accounts, the Army has earmarked $2,250 million for the HFM program over the next five years.

The committee supports the Army's emphasis on the modernization of armor and antiarmor forces. After eight years of gradual deterioration in the armor-antiarmor balance, the committee believes the Army's commitment to the modernization of ground combat systems is essential and appropriate. The committee notes that the Army has implemented a clear chain of command for heavy forces modernization, and commends the Army for integrating technology base activities into this overall modernization plan. Nevertheless, the committee has reservations about the Army's plans.

The committee agrees with the Army's conviction that the tank is the centerpiece of modern armor combat operations. The committee notes, however, that the Army's heavy chassis development program calls for developing four heavy combat vehicles—a new tank, a future infantry fighting vehicle, a combat mobility vehicle (an armored engineering vehicle) and an advanced field artillery system. Despite the emphasis on four systems, the Army's spending plans almost exclusively emphasize building a new tank. While the M2 fighting vehicle is the most vulnerable of the new combat vehicles, the Army's HFM plan devotes no funding to the future infantry fighting vehicle until after 1994. Similarly, the Defense Science Board recently concluded that the Army's artillery capabilities are seriously deficient, yet funding for an advanced field artillery system is also deferred until the second half of the next decade.

Were the Army's plan adopted as proposed, a new generation tank would be accompanied by 1960s vintage artillery and 1970s vintage fighting vehicles at the turn of the century. Even though the Army has spent more to modernize the M1 tank over the past five years than all other combat vehicles combined, the HFM plan places emphasis on a new tank at the expense of the other programs.

The committee has other reservations over the Army's plans. The Army testified that it will not proceed with an HFM tank until it has compared it both in terms of cost and effectiveness to improved versions of the M1 tank. Yet, the Army has programmed $900 million for an HFM tank over the next five years and nothing for evolutionary improvements to the M1 beyond the current block 2 program. The committee questions the Army's ability to objectively compare an HFM tank versus an upgraded M1 when funding plans seem to denote a priority on a new tank.

The committee is also concerned over apparent internal contradictions in the HFM plan. While the Army intends to let the contractors determine the appropriate power system for the common chassis, it continues to fund a $200 million engine development program that is not going to be concluded in time to be incorporated into the contractors' plans. The Army also has set a goal of a 55-ton tank, despite the fact that its own armor laboratories believe the protection levels required in a new tank would produce a vehicle that will weigh between 62 and 72 tons.

The committee believes the need to start fielding new combat systems justifies funding at this time. The reservations over the Army's plan, however, do not support obligating those funds until a careful review has been undertaken. Consequently, the committee directs that none of the funds provided for the common chassis program may be obligated or expended until the Secretary of Defense has undertaken a comprehensive review of the Army's HFM plans and has submitted a report on his evaluation of those plans to Congress. The committee requests that Secretary to review the concerns outlined above in evaluating the HFM program.

SOLDIER/MARINE ENHANCEMENT PROGRAM

As noted in the committee's findings, the committee believes that the Army and Marine Corps should devote greater attention to improving the weapons and personal equipment of infantrymen. The committee recommends an authorization of $18 million for research and development for the Army and $12 million for the Marine Corps.

The committee believes that the effectiveness of our nation's foot soldiers can be significantly increased through more aggressive efforts to identify and procure, as well as develop, more lethal infantry weapons and improved "soldier items," including lighter, more comfortable load-bearing equipment, field gear, survivability items, communications equipment, and navigation aids.

The committee emphasizes that these funds are not intended to be used to reinvent technology that is widely available from commercial sources or that have been developed in other countries, but may be used to evaluate and qualify "off the shelf" items of equipment. Where there is no available source for improved equipment, however, the services are encouraged to initiate appropriate development efforts utilizing our most advanced available technology.

The committee does not want to specify or direct the military departments to develop or procure any specific weapon or item of equipment. Rather, the purpose of the solider/marine enhancement program is to provide a general impetus for increasing the combat effectiveness of our Army and Marine infantrymen through the development of lighter, more lethal infantry weapons and improved equipment. It is intended that the services shall select the weapons and equipment to be developed within this effort.

The Army and Marine Corps shall inform the Congress, not later than 90 days following enactment of this bill, how they intend to obligate the funds that are provided and generally how they propose to increase the effectiveness of small infantry units through the development of new weapons and equipment. The reports will include recommended prioritized programs with five-year funding requirements. The committee expects the military departments to continue to place increased emphasis on this critical area in future budgets. While the services may submit individual reports, they are expected to coordinate their efforts to eliminate duplication.

The committee has authorized this funding initiative in a separate measure that will be offered for the consideration of the Senate during its debate on the defense authorization bill.

ELECTROTHERMAL GUN

The committee notes that the Army has accelerated its plans to evaluate electromagnetic and electrothermal guns. Electrothermal guns hold the promise of substantially higher kinetic energy for greater range and destructive potential. The committee understands that an independent analysis conducted for the Army indicated substantial promise in this technology. That analysis found that electromagnetic and electrothermal gun applications are not so distant a prospect as believed by Army laboratories, nor as available a weapon system as has been promoted by contractors and advocates.

The committee is persuaded, however, that the substantial promise offered by electrothermal gun technology does justify increased funding at this time. Consequently, the committee recommends an added authorization of $25 million for fiscal year 1990 and $35 million for fiscal year 1991. The committee expects the Army Science Board to monitor the electromagnetic/electrothermal gun development program during the next two years and report to the Secretary of the Army on progress in this technology. The Secretary shall relay a summary report of their findings to the Congress with the budget submissions for fiscal years 1991 and 1992.

ADVANCED INTEGRATED PROPULSION SYSTEM

The Army has committed approximately $100 million through fiscal year 1989 to develop an Advanced Integrated Propulsion System (AIPS) for combat vehicles. The AIPS program was developing both a diesel and a turbine propulsion system for heavy vehicles. The AIPS program has been underway for several years. The Army has decided to proceed with a Heavy Forces Modernization (HFM) program to develop a family of heavy vehicles. The HFM program calls for contractors to select their own power plants and submit them for evaluation.

The AIPS development schedule is incompatible with the HFM acquisition concept and schedule. If the Army insists on permitting the contractors freedom to select power plants, the contractors will not be able to incorporate AIPS into their submissions until a year after the common chassis are scheduled for delivery. Why does the Army argue that the contractors are free to select any power plant they wish, when clearly the Army considers AIPS to be the ideal power plant?

The committee believes these fundamental inconsistencies must be reconciled by the Secretary of Defense before the HFM program and the AIPS program proceed further.

ANTI-SATELLITE AND SPACE CONTROL

The committee is increasingly concerned about the vulnerability of critical U.S. satellites and the general lack of flexibility, redundancy, and responsiveness of our space access systems which make up such critical components of our space control capability. These deficiencies appear largely to be the result of decades of incremental decisions favoring "peacetime efficiency" over wartime needs. Ignoring the costs of providing survivability and redundancy effectively hides the true cost of performing a mission or function from space. Moreover, peacetime efficiency practices and standards have become embedded in our process of planning, approving, and acquiring space systems.

The committee has received equally disturbing testimony that the Soviet Union has developed a space program expressly tailored for wartime needs. In brief, while our satellites tend to be significantly more capable on a one-for-one basis, they are also far less numerous and are vulnerable. U.S. satellites which the Soviets might destroy in a war cannot be replaced. However, the Soviets appear to have the ability to augment significantly their peacetime constellations and to replace wartime losses rapidly.

The administration insists that the U.S. lack of an anti-satellite (ASAT) capability represents a serious deterrence and warfighting deficiency. The administration appears willing to spend significant sums to acquire this capability. While the committee believes that the Soviet Union's current monopoly in ASAT capabilities is a serious deficiency in our space control capability and should be redressed, a U.S. ASAT capability alone could be a weak deterrent unless or until the nation substantially improves satellite survivability, jamming resistance, launch responsiveness and the way we approach satellite construction. Yet, while the administration has program in place for acquiring an ASAT capability, no apparent plan has been submitted to Congress to develop the other essential ingredients of a sound space control strategy.

To be sure, developing and implementing such a plan will be costly, relatively slow, and difficult. Costly because survivability, jam resistance, and launch responsiveness are inevitably expensive. Slow because budgets are constrained and because designing and producing different kinds of satellites and launch vehicles to replace what is already fielded or programmed take time. And difficult because we must fundamentally change the way we do business, and the way we do business has become comfortable. Difficult, too, because there seem to be many paths to progress, and difficult because choosing one path may foreclose others.

What is required is extensive analysis, planning, and debate, with due regard for budgetary realities. The committee understands that the National Space Council intends to undertake such a study. The committee supports this initiative and intends to hold hearings next year on the Space Council's findings and guidance. A successful effort must provide clear and consistent policy direction; address requirements, programs, resources, timetables, priorities, and organizational issues; and cut across multiple agencies and departments.

To complicate matters further, DoD has developed, or is developing, requirements for expensive new missions in space. The committee's view is that these new missions will be extremely hard to justify given the substantial funding requirements to achieve improved survivability, redundancy and flexibility within our existing space platform and launch capabilities. Such new missions as space-based broad area surveillance are unlikely to receive funding priority if they are tailored narrowly to a specialized U.S. military mission. To the extent additional users—other U.S. agencies, and allied and friendly governments—can be persuaded both of the value of such systems for their missions and of the necessity to share the development, procurement, and operating costs, the likelihood that programs of this nature can be brought to fruition is increased. The committee invites the attention of the Space Council to the need for such coalition-building activities in order to justify costly new space systems and capabilities.

The committee notes with utmost concern that DoD initiated the kinetic kill ASAT program in fiscal year 1989 without seeking congressional approval. Moreover, a portion of the funds came from the terminated Miniature Homing Vehicle (MHV) ASAT program after Congress was informed that residual funds were required for termination liabilities. The committee accepts testimony by the Army, the current lead-service for the program, that this action was a mistake that shall not be repeated. The committee directs the Army to ensure that the Defense Advanced Research Projects Agency (DARPA) ASCOT concept is among the candidates for the kinetic kill system.

The committee notes that the Air Force believes it is necessary to make additional improvements to the satellite surveillance and warning system for effective employment of an ASAT system. The committee intends to review Air Force proposals for upgrades carefully since the current Cheyenne Mountain upgrade program has experienced difficulties.

GROUND BASED COMMON SENSOR

The Army is just now completing fielding of the Teampack and Trailblazer systems in combat divisions, yet it is proposing to upgrade these systems because of performance problems and the need to meet new requirements. The Army has proposed a new common system incorporating Teampack and Trailblazer capabilities. The committee supports these objectives but concludes that the Army has not defined the program sufficiently to initiate procurement at this time. The committee recommends deferring procurement funding for fiscal year 1990 and recommends a reduction in research and development. Further, the committee directs the Secretary of the Army to establish distinct program goals, milestones, and acquisition objectives, before submitting any request for procurement funding in the future.

PALLETIZED LOADING SYSTEM

Congress directed the Army to evaluate alternative proposals for palletized loading systems within 24 months of enactment of the National Defense Authorization Act for Fiscal Years 1988 and 1989. The Army has apprised the committee that unless the statutory deadline is revised, the scope of testing required to select a winning system might have to be foreshortened, thereby threatening the competition. The committee believes that the integrity of the testing process justifies an extension of the test period, and recommends a provision (sec. 230) extending the source selection deadline by six months.

MULTI-PURPOSE INDIVIDUAL MUNITION

The Army has been conducting a proof-of-principle evaluation of candidate systems for the Multi-Purpose Individual Munition (MPIM). The committee understands that the Army would have requested funds to continue the proof-of-principle evaluation had additional resources been available. The committee recommends an authorization of $5 million to continue the evaluation in fiscal year 1990. The committee cautions the Army to adhere to the schedule for development outlined by the Army in correspondence to the committee on February 26, 1988.

WIDE AREA SIDE PENETRATOR MINE

The Army decided to terminate further development of the Wide Area Side Penetrator Mine (WASPM). The mine was developed to destroy heavy armored vehicles in wooded and urban areas where other mines are less effective. The Army acknowledged that the program has a high priority, and that it was terminated exclusively because of funding constraints.

The committee believes the potential promise of the WASPM mine justifies completing its development. The committee reserves judgment on whether or not the Army should procure the system based on operational testing of the developed system. The committee recommends an authorization of $12.9 million to complete development of the WASPM mine.

FIBER OPTIC GUIDED MISSILE IN ANTI-ARMOR MISSION

The committee notes that the Fiber Optic Guided Missile (FOG–M) was originally designed to attack armored combat vehicles at extended ranges. The Army then realized the substantial potential of the FOG–M for use in the air defense mission, which the committee fully supports. The committee believes, however, that the FOG–M remains an extremely promising anti-armor weapon system. Consequently, the committee recommends an authorization of $15 million to be used exclusively for purposes of initiating development of features required to reintroduce the FOG–M to anti-armor missions. The funds should be used in part to evaluate the merit of installing the FOG–M on an armored wheeled or tracked vehicle.

STINGRAY

The amended budget request contains $3 million to start the development of the Stingray system. The funds are contained in the Combat Vehicle Improvement Program for the Bradley fighting vehicle, Block 3. The committee notes that operational analyses conducted by the Army's Armor-Antiarmor Task Force indicate that Stingray has enormous potential in improving the survivability and effectiveness of the Bradley fighting vehicle.

The committee has monitored the slow progress of the Stingray system for some time. The committee believes that it has not been accorded the resources commensurate with its promise to improve combat performance for combat vehicles. The committee believes the Army should proceed promptly with Stingray full scale development if the force-on-force field exercises and utility analysis scheduled for completion this fall confirm its promise.

The committee recommends an increase in authorization of $20 million to initiate full scale development of Stingray. The classified annex to this report contains additional observations.

UH-60 COMPOSITE BLADES

In fiscal year 1987, the Congress established an update program for the UH-60 helicopter fleet. That update program included improved avionics as well as a composite rotor system, with a goal of improving reliability and lowering maintenance costs. The Army decided to terminate further work on the update program because of cost. The committee continues to believe that a composite rotor system will substantially lower ownership costs in the future and encourages the Army to continue work on a composite rotor system utilizing funds already appropriated for that purpose.

MAPPING, CHARTING AND GEODESY

The committee recommends an authorization of $7.9 million for engineering development of improved positioning equipment and terrain information systems. The authorized funding level will keep the program apace with the systems it is intended to support, specifically the All Source Analysis System (ASAS), Joint Surveillance and Target Acquisition Radar System (JSTARS) and Advanced Field Artillery Data System (AFATDS).

FOREIGN MATERIAL EXPLOITATION

The army has requested a substantial increase in funding for the foreign material exploitation program. The committee supports the program and recognizes that it has been underfunded in the past. However, the Army has a considerable backlog of tasks, and the fisal year 1990 request is based on planned fiscal year 1989 activities that have not been executed. Consequently, the committee has reduced the requested amount by $6.5 million, which is still a substantial increase over fiscal year 1989 funding.

BIODEGRADABLE MATERIAL RESEARCH

The food rations for the entire Department of Defense are developed at the U.S. Army Natick Research, Development and Engineering Center. The Subsistence Protection Branch of the Food Engineering Directorate at Natick was issued a limited sum in fiscal year 1989 to research the potential use of biodegradable materials in rations packaging designs. The allotment of Food Program funds to specific projects (i.e., biodegradable packaging) is determined at the Natick Center.

It is necessary that issues such as plastic degradation be recognized at the highest levels of government, and that the military services be allowed to set a precedent in showing this concern for the environment. The committee foresees the use of biodegradable materials in rations packaging systems as a partial solution to the plastic disposal problem.

To continue this research into the potential use of biodegradable materials in rations packaging designs in fiscal year 1990, an amount of up to $100,000 is authorized in section 228.

ELECTRONIC PERSONNEL RECORDKEEPING

The committee is aware of the growing civilian application of electronic data cards as a means of storing personal information. Such electronic data cards could offer substantial savings in personnel management. The Secretary of the Army is requested to evaluate the prospect of introducing such electronic data cards into the Army and to survey private industry to identify alternative "off-the-shelf" technologies that might be adapted for that purpose. The Secretary is requested to provide the results of the evaluation by February 1, 1990.

LOW-PROFILE ANTENNA

Last year the committee indicated an interest in the Eyring low profile antenna system. The committee is aware that the Army intends to conduct a field evaluation of the antenna and requests the Army to provide the results of its evaluation to the committee by July 1, 1990.

LIGHT ARMORED VEHICLE

The Sheridan M551 armored reconnaissance vehicle is nearing the end of its economic service life and, at some point, the Army will have to develop a suitable replacement. Additionally, recent events in Panama have demonstrated the utility of wheeled armored vehicles in low intensity conflict situations.

The committee supports the procurement of an appropriate replacement for the M551 and directs the Army to report to the Congress on its potential replacement plans by January 15, 1990.

MINE DETECTION CAPABILITY

The committee is concerned about the ability of our ground forces to cope effectively with the increasingly sophisticated threat of mines and booby traps across the spectrum of high to low intensity conflict. Our forces in Vietnam sustained numerous casualties from mines and booby traps.

The committee believes that the development of a capability to detect both metallic and non-metallic mines and booby traps should be emphasized more vigorously. The committee is aware of several technical approaches currently being examined by the Defense Advanced Projects Agency. In addition to those technical approaches, the committee directs the Army to examine alternative approaches, including the training and use of military dogs, which have been used extensively in the past. The Army is directed to report its findings to the Congress by March 1, 1990. This report should include a discussion of the threat, an evaluation of various alternative solutions, and a recommended program with the necessary funding.

R-1 Line	PE	Program	Revised FY 1990 Request	Senate	
				Change to Request	Authorized
		CHANGES TO NAVY RDT&E			
3	61153N	DEFENSE RESEARCH SCIENCES	341,651	10,000	351,651
23	63508N	SHIP PROPULSION SYSTEM	14,123	(14,123)	
24	63573N	INTEGRATED ELECTRIC DRIVE	11,998	46,189	58,187
44	11221N	FLEET BALLISTIC MISSILE SYSTEM	47,558	(5,000)	42,558
45	11224N	SSBN SECURITY TECHNOLOGY PROGRAM	41,994	8,780	50,774
63	63260N	AIRBORNE MINE COUNTERMEASURES	13,027	6,400	19,427
76	63513N	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	12,066	(12,066)	
82	63529N	ADVANCED ASW TARGET	25,307	5,500	30,807
87	63561N	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	37,203	(20,000)	17,203
143	64262N	V-22A		255,000	255,000
		SOLDIER/MARINE ENHANCEMENT PROGRAM(MC)		12,000	12,000
210	24134N	A-6 SQUADRONS	23,215	32,900	56,115
210a		A-6 PRIOR YEAR SAVINGS		(32,900)	(32,900)
211	24136N	F/A-18 SQUADRONS	50,644	20,000	70,644
222	25604N	TACTICAL INFORMATION SYSTEM	96,553	(4,900)	91,653
238	64230N	WARFARE SUPPORT SYSTEM	33,994	(5,000)	28,994
239	64231N	TACTICAL COMMAND SYSTEM	47,475	(5,000)	42,475
246	31327N	TECHNICAL RECONNAISSANCE & SURVEILLANCE	[ ]	[3,800]	
250	34111N	SPECIAL ACTIVITIES	[ ]	[20,000]	
		INTEL & COMMUNICATIONS CLASSIFIED	686,247	23,800	710,047
251	63721N	ENVIRONMENTAL PROTECTION	10,687	(1,500)	9,187
267	65862N	RDT&E INSTRUMENTATION AND MATERIEL SUPP	30,630	(1,000)	29,630
268	65863N	RDT&E SHIP AND AIRCRAFT SUPPORT	98,251	(5,000)	93,251
269	65864N	TEST AND EVALUATION SUPPORT	346,913	(11,000)	335,913
275	78011N	INDUSTRIAL PREPAREDNESS	40,499	5,000	45,499
		TACTICAL OCEANOGRAPHY		3,000	3,000
		FAST SEALIFT TECHNOLOGY DEVELOPMENT		30,000	30,000
		TOTAL RDT&E, NAVY		341,080	

R-1 Line	PE	Program	Revised FY 1991 Request	Senate Change to Request	Senate Authorized
		CHANGES TO FY1991 NAVY RDT&E			
23	63508N	SHIP PROPULSION SYSTEM	18,924	(18,924)	
24	63573N	INTEGRATED ELECTRIC DRIVE	11,802	51,105	62,907
45	11224N	SSBN SECURITY TECHNOLOGY PROGRAM	42,143	15,000	57,143
76	63513N	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	12,181	(12,181)	
246	31327N	TECHNICAL RECONNAISSANCE & SURVEILLANCE	[ ]	[5,800]	
		INTEL & COMMUNICATIONS CLASSIFIED	707,265	5,800	713,065
275	78011N	INDUSTRIAL PREPAREDNESS	41,168	5,000	46,168
		TACTICAL OCEANOGRAPHY		5,500	5,500

		AUTHORIZATION CHANGES NAVY		51,300	
		FY1991 NAVY R&D PROGRAMS DEFERRED			
44	11221N	FLEET BALLISTIC MISSILE SYSTEM	63,114		--
79	63525N	PILOT FISH	54,869		--
83	63536N	RETRACT JUNIPER	40,655		--
93	63576N	CHALK EAGLE	110,394		--
119	63740N	LINK LAUREL	123,851		--
121	63746N	RETRACT MAPLE	188,629		--
122	63748N	LINK PLUMERIA	12,697		--
124	63751N	RETRACT ELM	103,234		--
130	63787N	SPECIAL PROCESSES	31,258		--

		TOTAL NAVY R&D DEFERRED		(728,701)	

RATIONALIZING NAVY/MARINE CORPS MEDIUM ATTACK SQUADRONS

The committee is convinced that it is time to reconfigure elements of the Navy and Marine Corps medium attack aircraft forces. For years, both the Navy and the Marine Corps have operated A–6 aircraft. The Navy has a pressing shortfall of A–6 aircraft while the Marine Corps would like to discontinue operation of A–6 aircraft and operate two-seat F–18 aircraft in the night, all-weather attack mission. Currently, the Marine Corps operates a large number of different types of aircraft, which is increasingly proving to be a maintenance burden.

The committee believes that it is time for the Marine Corps to transfer its A–6 aircraft to the Navy and to replace them with two-seat F–18s. The committee understands, for example, that currently the Marine Corps has a requirement for 150 A–4s, RF–4s, OA–4s and A–6s, which could be met with only 112 F–18Ds. The Navy, by contrast, has a serious shortfall of A–6s, which would be ameliorated by the return of Marine Corps A–6s.

Consequently, the committee directs the Secretary of the Navy to transfer A–6 aircraft from the Marine Corps to the Fleet starting not later than October 1, 1989. The Secretary shall transfer at least one squadron per year. The committee directs the Secretary to change the composition of F–18 procurement to ensure that adequate D model F–18s are procured over the five-year plan to accommodate this transition. The committee recommends an increase in authorization of $5 million to initiate such procurement, since two-seat F–18s cost somewhat more than single-seat aircraft.

The committee understands that there will have to be certain improvements and upgrades to the radar on the F–18 to provide it with the required all-weather precision navigation and attack capability. In order for the Marine Corps to provide precision close-air support bombing in adverse weather, beginning in the fiscal year 1991 budget, the Secretary of the Navy shall insure that the first squadron of F–18 aircraft is fitted with a radar beacon bombing system.

The committee recommends an authorization of $20 million to begin this effort in fiscal year 1990. However, the committee directs that none of the funds be obligated until the Secretary of the Navy reports the scope of funds required for the radar improvement and certifies that those funds are included in the five-year defense program.

Furthermore, in view of the Marine Corps' longstanding requirement for a survivable all-weather bombing capability, the committee believes that the development and installation of a terrain following/terrain clearance mode for the F–18D should be pursued by the Department of the Navy.

Finally, the committee notes that the Navy will have to continue to operate the A–6 aircraft well into the next century. The A–6 in its current configuration will not be able to survive the function effectively without further block improvements. The committee understands that $32.9 million of the previous A–6G program has not been obligated and remains available for obligation. The committee directs that those funds may be used only for purposes of initiating a block 3 improvement program for the A-6, with emphasis on survivability, reliability, and operability improvements.

ACTIVE IONOSPHERIC AURORAL RESEARCH

The committee believes that exploitation of the unique characteristics of the auroral ionospheric field could yield signficant benefits for military communications. Long term research could provide even greater benefit by accessing the tremendous energy embodied in the electrojet current.

The committee recommends authorization of $10 million in fiscal year 1990 for the Director, Defense Research and Engineering and the Office of Naval Research to jointly manage a study of the technologies to exploit the auroral field.

INTEGRATED ELECTRIC DRIVE

The administration requested authorization of $12 million in fiscal year 1990 for the electric drive program; however, major portions of the Ship Propulsion System program, for which $14.1 million was requested, and the Shipboard System Component Development program, for which $12.1 million was requested, are dedicated to the electric drive system. The Navy refers to the whole as the Integrated Electric Drive program.

The committee believes the various parts of this program should be merged for maximum management focus on the goal of getting the system to sea at the earliest possible time.

The committee recommends authorization of $58.2 million for the Integrated Electric Drive program, which is a merger of the amounts requested for the Electric Drive program, the Ship Propulsion System program, and the Shipboard System Component program, plus an increase of $20 million. It includes funding for development of Intercooled Recuperated (ICR) gas turbine engines. The Navy is directed to remove from the Integrated Electric Drive program all nonpertinent activities, to assemble them without other programs and to finance them by reprogramming from sources other than the Integrated Elecric Drive program.

The committee designates the Integrated Electric Drive program a congressional interest item and funds provided shall not be diverted to or used for other purposes or reprogrammed without congressional approval.

FLEET BALLISTIC MISSILE SYSTEMS RDT&E

The amended defense budget request for fleet ballistic missile systems RDT&E for fiscal year 1990 is $47.6 million. This level contains an increase of $8 million for initiating vulnerability and effectiveness research on the D5 (Trident II) missile, soon to be deployed, without any decrease in the planned level of effort for similar research on the C3/C4 missiles that the D5 is to replace in coming years. In contrast, the operation and maintenance request for fiscal year 1990 for engineering support for these soon-to-be replaced missiles was reduced by $35 million in the amended defense budget request, and this action was deemed an acceptable risk by the Navy. If a reduction in on-going engineering support is acceptable, a reduction in long-term research and development on these missiles is justified.

Accordingly, the committee recommends a reduction of $5 million to the requested amount and expects the Navy to phase out C3/C4 research and developoment in future budget submissions. Furthermore, since over half of the program element's funds are for a generic SSN/SSBN submarine acoustic countermeasure project unrelated to ballistic missile systems, the committee urges the Navy in future budget submisisons to display missile research and development efforts and submarine survivability research and development separately. The committee does not authorize an amount for fiscal year 1991.

SSBN SECURITY PROGRAM

The committee notes with concern that the level of effort in the SSBN security program has been declining in real terms over several years, even as concerns have been expressed about potential future threats to a force that is diminishing in size and increasing in importance in terms of missions and capabilities. Accordingly, the committee allocates $8.78 million above the requested amount for fiscal year 1990 and $15 million above the requested amount for fiscal year 1991, for the purpose of investigating advanced threats that have the potential to degrade significantly the current level of U.S. SSBN survivability.

ELECTROMAGNETIC AIRCRAFT LAUNCHER SYSTEM (EMALS)

The committee continues to support the development of an electromagnetic aircraft launcher system as a potential replacement for steam catapaults. The recent successful development of a working half-scale model has proven that the technology is viable. Last year, the committee fully supported the Navy's plan to proceed with a full scale advanced development model. The committee is not satisfied with the Navy's progress in complying with the congressional direction on this program in the statement of managers accompanying the conference report on the Department of Defense Appropriations Act for Fiscal Year 1989.

The committee directs the Navy to continue with the planned, full scale, competitive prototype development of an electromagnetic catapault for naval ships. None of the funds provided for the shipboard aviation systems program (P.E. 0603512N) may be obligated until the Navy awards initial contracts for this prototype development.

AIRBORNE MINE COUNTERMEASURES

The administration requested authorization of $13.03 million in fiscal year 1990 for the Navy's Airborne Mine Countermeasures program.

The committee recommends authorization of $19.43 million in fiscal year 1990, an increase of $6.4 million for the development of laser mine countermeasures equipment.

ADVANCED ASW TARGET

The administration requested authorization for $25.3 million for the Advanced ASW Target program.

The committee recommends an authorization of $30.8 million in fiscal year 1990, an increase of $5.5 million of which at most $4.0 million is for an additional large, fast, deep target to support the MK 48 ADCAP testing program and at least $1.5 million is for completion of the work necessary to support fiscal year 1990 procurement of the Expendable Mobile ASW Training Target (EMATT).

ADVANCED SUBMARINE SYSTEM DEVELOPMENT

The administration requested authorization for $37.2 million in fiscal year 1990 for advanced submarine system development. This is a new program established to transition the advanced submarine technology being developed by the Defense Advanced Research Projects Agency (DARPA).

Included in the program is the early establishment of the R&D submarine, a worthy and necessary project; however, the committee notes many of the other activities to be undertaken are in addition to the DARPA program and, in fact, are similar to Navy projects funded elsewhere. The committee questions the use of this program for the extension of evolutionary activities, especially those more appropriately conducted elsewhere. For instance, machinery silencing is on-going work conducted elsewhere and work on HY-130 steel which is intended for the SSN-21 program ought to be undertaken in the RDT&E program devoted to SSN-21 development.

Many of the projects undertaken by DARPA have entered into contract in the past year. The committee recognizes these activities may not be ready for transition to the Navy at this time; however, the committee expects when technology programs do transition, they will come with resources for at least the fiscal year in which the transfer takes place. The administration requested $56.0 million in fiscal year 1991 for the Navy's Advanced Submarine System Development program. This amount should serve as a planning figure to continue programs transferred from DARPA in fiscal year 1990.

The committee recommends authorization of $17.2 million in fiscal year 1990, a reduction of $20 million from the request.

V-22 TILT ROTOR AIRCRAFT

The administration did not request authorization for funds in fiscal year 1990 for continuation of the V-22 tilt rotor aircraft flight testing program.

The committee recommends authorization of $255 million in fiscal year 1990 for continuation of the V-22 tilt rotor aircraft flight testing program. Further discussion of the V-22 program can be found in the Aircraft Procurement, Navy section of this report.

LIGHT ARMORED VEHICLE ASSAULT GUN

The Marine Corps advised the committee in November 1988 that a full scale development decision and choice of gun caliber from the 75 mm, 90 mm or 105 mm candidates for the light armored vehicle assault gun were planned for December 1988 with a contract award planned for fiscal year 1990. The Marine Corps later advised the committee in testimony that no gun selection has been made; however, a market survey was conducted for a 105 mm gun.

The committee notes the Marine Corps has not conducted market surveys for competitive gun systems, but has provided funds for initial safety certification for 75 mm ammunition, with 105 mm ammunition already in the inventory. Previously, the Marine Corps indicated that safety certification of the gun ammunition would be major factors in the selection process and probably would represent the major development effort in terms of time. In order to have a complete portfolio for consideration, the committee recommends the Marine Corps proceed with safety certification of the 90 mm gun ammunition through the NATO cooperative development testing program.

TACTICAL INFORMATION SYSTEM

The administration requested authorization of $96.6 million in fiscal year 1990 for the tactical information system. This program includes the Navy contribution to the Joint Tactical Information Distribution System (JTIDS). Of the amount requested, $52.8 million is for a major contract, and the remainder funds level-of-effort activities involving integration and testing.

The committee recommends authorization of $91.7 million in fiscal year 1990 for the tactical information system, a reduction of $4.9 million from the request.

WARFARE SUPPORT SYSTEM

The administration requested authorization of $34 million in fiscal year 1990 for the warfare support system. Of the amount requested, $11 million is for the Relocatable Over The Horizon Radar (ROTHR), and the remainder is distributed among three level-of-effort projects concerned with developing a common automated multi-source data fusion system which will support fleet and shore users in tactical command decisions and weapons targeting.

The committee recommends authorization of $29 million in fiscal year 1990 for the warfare support system, a reduction of $5 million from the request.

TACTICAL COMMAND SYSTEM

The administration requested $47.5 million in 1990 for the tactical command system. Of the amount requested, $19.7 million is for the upgrade of anti-submarine warfare (ASW) operations centers. The remainder supports tactical information processing and display and decision aids for theater commanders, commanders of fleets, and subordinate commanders ashore.

The committee recommends authorization of $42.5 million in fiscal year 1990 for the tactical command system, a reduction of $5 million from the request.

FAST SEALIFT TECHNOLOGY DEVELOPMENT

The committee added funds to the Shipbuilding and Conversion account for the procurement of ships for fast sealift. In order to have ships broadly useful to fleet needs and to assist in developing standard or common hull types for maximum producibility, the Navy in the near term is to concentrate development efforts to achieve a multimission ship for sealift, amphibious lift and any other fleet functions suitable for a ship in the 20,000 to 25,000 ton range. The ship should be designed for maximum automation and minimum manpower. Emphasis should be placed on means for easily and rapidly changing the mission character of the ship.

The committee believes higher ship speed is a generally useful attribute. The committee notes the conclusions presented in the Navy report (*Fast Sealift Program Technology Assessment Report*) required by the National Defense Authorization Act for Fiscal Year 1989 are necessarily tentative and preliminary given that much work needs to be done in the area of large propulsion power applications in alternative designs for displacement hulls. Accordingly, the Navy is directed to conduct tank and operational tests, as required, to fully evaluate the potential of the displacement hull and power concept labeled "semi-planing monohull" on a schedule not to exceed 24 months in order to proceed knowledgeably to prototype determinations. This guidance is consistent with the program laid out in the sealift technology report. It is not intended that efforts be limited to this approach. However, it is clear from the technology report that additional knowledge in this area is required so as to ensure sufficient information to make decisions.

The committee recommends the authorization of an additional $30 million in the RDT&E account for the purpose of fast sealift technology development.

TACTICAL OCEANOGRAPHY

The committee believes a significant contribution can be made to the conduct of anti-submarine warfare by enhancing the transition of oceanographic knowledge into operational practice. The oceanographic and meterological instrumentation program funded in previous years at Woods Hole Oceanographic Institution provides a base for the further development of instruments for ocean research that have equal applicability to defense needs. Major thrusts in oceanography today, such as telemetry, remote vehicle operation, high resolution sonar and optics, secure unattended bottom mounted sensors, tomography, data combination and display, and real time in-situ measurement of a variety of chemical species, are meeting needs for data very similar to those required for defense. Oceanography is a very fertile field for early and inexpensive assessment of proposed new platforms and sensing techniques. Improved extraction of information from the oceans is a priority activity which should have immediate applicability to tactical performance.

The committee recommends authorization of $3 million in fiscal year 1990 exploratory development RDT&E for the tactical oceanography program at the Woods Hole Oceanographic Institution.

REPORT ON ADVANCED SHIPBUILDING STEEL

The Navy has been developing two steel compositions for shipbuilding. One is planned specifically for submarine applications and will add substantial costs to the construction of these ships. The other composition is cheaper and does not present unique problems in welding.

The Navy is directed to provide a report to the Congress by January 31, 1990 comparing and contrating HY-130 steel and the composition known as High Strength-Low Alloy (HSLA) steel. The report should provide an accurate assessment concerning costs associated with welding characteristics and welding support for the materials, as well as any other unique properties of note. Also, the report should assess the suitable uses for each of the materials.

UNMANNED UNDERSEA VEHICLES

The committee requests the Secretary of the Navy to provide a report on unmanned undersea vehicles not later than February 1, 1990 which discusses: (1) options for developing long-endurance unmanned undersea vehicles, including identification of mission essential technologies, and (2) concepts for handling unmanned underea vehicles aboard surface combatants. The Navy is advised that the Projection Forces and Regional Defense Subcommittee intends to hold a hearing on this matter next year.

MINE COUNTERMEASURES STUDY

The Navy has made significant advances in the past few years in allocating funds for mine countermeasures capabilities, which will be entering fleet operation in the years ahead. The committee would like to receive a report on the Navy's current requirements for further increases in mine countermeasures capability.

The committee directs the Secretary of the Navy to report to the Senate and House Committees on Armed Services and Appropriations on requirements for mine countermeasures capability not later than November 1, 1989.

DISPLAY OF NAVY RDT&E PROGRAMS

The presentation of the Navy RDT&E budget in the R-1 document does not display programs in a logical arrangement. During a subcommittee hearing on future surface combatants, related R&D programs were presented as "clusters of technologies", and it would be helpful if the entire Navy RDT&E budget would be displayed as "clusters" of related programs.

Since the R-1 document is prepared by the Defense Department, the committee directs the Secretary of Defense, in coordination with the Secretary of the Navy, to prepare a new, unclassified display of Navy RDT&E programs which shall be used as the basis for a revised R-1 document in the next budget cycle. The Secretary of Defense shall submit a report not later than November 1, 1989 to the Senate and House Committees on Armed Services and Appropriations which describes the planned revisions to the Navy RDT&E portion of the R-1 document.

R-1 Line	PE	Program	Revised FY 1990 Request	Senate Change to Request	Senate Authorized
		CHANGES TO AIR FORCE RDT&E			
18	63112F	ADVANCED MATERIALS FOR WEAPON SYSTEMS	12,116	(3,000)	9,116
30	63269F	NATIONAL AERO SPACE PLANE TECH PROG	[100,000]	100,000	100,000
33	63363F	HYPERVELOCITY MISSILE	8,306	(8,306)	
50	63311F	ADVANCED STRATEGIC MISSILE SYSTEMS	99,352	20,000	119,352
80	12431F	DEFENSE SUPPORT PROGRAM (PY SAVINGS)	123,704	(20,000)	103,704
88	33603F	MILSTAR SATELLITE COMMUNICATIONS SYS	[ ]	[100,000]	
		STRATEGIC CLASSIFIED	1,066,077	100,000	1,166,077
107	64231F	C-17 PROGRAM	915,227	(30,000)	885,227
160	27215F	TR-1 SQUADRON	110,710	(25,000)	85,710
164	27319F	STANDOFF LAND ATTACK MISSILE	5,062	(5,062)	
167	27417F	AIRBORNE WARNING AND CONTROL SYS (AWACS)	135,132	(67,700)	67,432
167a		PRIOR YEAR AWACS-RSIP		(47,500)	(47,500)
174	27585F	SEEK SPINNER		(19,900)	(19,900)
		TIARA GENERAL REDUCTION		(8,000)	(8,000)
		COPPER HELIX		2,000	2,000
191	31313F	DEFENSE DISSEMINATION PROGRAM	[ ]	[-7,600]	
196	31357F	NUDET DETECTION SYSTEM	[ ]	[3,700]	
202	34111F	SPECIAL ACTIVITIES	[ ]	[168,500]	
		SPECIAL ACTIVITIES PRIOR YEAR		(16,100)	(16,100)
		INTEL/COMMUNICATIONS CLASSIFIED	2,005,300	164,600	2,169,900
215	64735F	RANGE IMPROVEMENT	96,769	(10,000)	86,769
222	65807F	TEST AND EVALUATION SUPPORT	296,352	(2,000)	294,352
225	65863F	RDT&E AIRCRAFT SUPPORT	58,448	(2,000)	56,448
226	65894F	REAL PROPERTY MAINTENANCE - RDT&E	94,752	(5,000)	89,752
231	35160F	DEFENSE METEOROLOGICAL SATELLITE PROGRAM	52,641	(5,000)	47,641
235	78011F	INDUSTRIAL PREPAREDNESS	70,751	25,000	95,751
		UNDISTRIBUTED REDUCTION		(5,000)	(5,000)
		PRIOR YEAR SAVINGS		(54,000)	(54,000)
		TOTAL RDT&E, AIR FORCE		78,032	

R-1 Line	PE	Program	Revised FY 1991 Request	Senate	
				Change to Request	Authorized
		CHANGES TO FY1991 AIR FORCE RDT&E			
33	63363F	HYPERVELOCITY MISSILE	6,189	(6,189)	
50	63311F	ADVANCED STRATEGIC MISSILE SYSTEMS	99,272	30,000	129,272
191	31313F	DEFENSE DISSEMINATION PROGRAM	[ ]	[-5,000]	
196	31357F	NUDET DETECTION SYSTEM	[ ]	[1,800]	
202	34111F	SPECIAL ACTIVITIES	[ ]	[393,800]	
		INTEL/COMMUNICATIONS CLASSIFIED	2,072,748	390,600	2,463,348
235	78011F	INDUSTRIAL PREPAREDNESS	71,513	30,000	101,513
		AUTHORIZATION CHANGES AIR FORCE		444,411	

R-1 Line	PE	Program	Revised FY 1991 Request	Senate Change to Request	Senate Authorized
		FY1991 AIR FORCE R&D PROGRAMS DEFERRED			
30	63269F	NATIONAL AERO SPACE PLANE TECH PROG			--
47	63105F	OLYMPIC	[ ]		--
48	63110F	SPECIAL EVALUATION PROGAM	[ ]		--
49	63111F	MERIDIAN	[ ]		--
51	63312F	ADVANCED CONCEPTS	[ ]		--
52	63321F	BELL WEATHER	[ ]		--
59	64240F	B-2 ADVANCED TECHNOLOGY BOMBER	1,446,532		--
61	64312F	ICBM MODERNIZATION	751,546		--
66	11120F	ADVANCED CRUISE MISSILE	[ ]		--
	11815F	ADVANCED STRATEGIC PROGRAMS	6,300		--
71	12310F	NCMC - TW/AA SYSTEMS	105,569		--
74	12325F	JOINT SURVEILLANCE SYSTEM	1,674		--
75	12411F	SURVEILLANCE RADAR STATIONS/SITES	8,198		--
76	12412F	DISTANT EARLY WARN (DEW) RADAR STATIONS	2,847		--
77	12417F	OVER-THE-HORIZON BACKSCATTER RADAR	18,145		--
80	12431F	DEFENSE SUPPORT PROGRAM (PY SAVINGS)	60,516		--
88	33603F	MILSTAR SATELLITE COMMUNICATIONS SYS	[ ]		--
89	35124F	SPECIAL APPLICATIONS PROGRAM	[ ]		--
90	35172F	BERNIE	[ ]		--
91	35892F	SPECIAL ANALYSIS ACTIVITIES	[ ]		--
		STRATEGIC CLASSIFIED	1,026,513		--
114	64245F	SHORT RANGE ATTACK MISSILE-TACT (SRAM-T)	109,418		--
	35185F	CALVARY	5,000		--
212	64408F	ADVANCED LAUNCH SYSTEM	99,272		--
228	35110F	SATELLITE CONTROL FACILITY	124,717		--
229	35119F	SPACE BOOSTERS	244,750		--
230	35130F	CONSOLIDATED SPACE OPERATIONS CENTER	24,762		--
231	35160F	DEFENSE METEOROLOGICAL SATELLITE PROGRAM	49,647		--
		TOTAL AIR FORCE R&D DEFERRED		(4,085,406)	

HYPERVELOCITY MISSILE PROGRAM

The amended budget request includes $8.3 million in fiscal year 1990 and $6.2 million in fiscal year 1991 for research and development on the hypervelocity missile program. The committee has been informed that the current design of the missile is flawed and that fundamental redesign is now required. The committee also notes, however, that the current program does not anticipate entering full scale development until the middle of the next decade. At this rate, production hypervelocity missiles would not become available until the next century. The committee notes that the Air Force has proposed to terminate the only anti-armor missile in production (the Maverick missile), even though it will have acquired barely a third of its operational inventory requirements. The committee questions the wisdom of the Air Force's plans to operate for 10 years with no anti-armor missile in production.

Both the Army and the Air Force have been developing uniquely designed hypervelocity missiles. The Air Force has rejected the Army's hypervelocity missile design because it considers the Army version too big and too expensive. The Army's design would be 50 percent heavier and may cost 30 percent more than the Air Force's desired goals. The committee notes, however, that the Army's hypervelocity missile will weigh a third as much and cost one-fifth as much as the existing AGM-65 Maverick missile. The committee believes that the Army's hypervelocity missile represents a dramatic improvement over the AGM-65 and does not require waiting 10 years and an expensive redundant development program. Consequently, the committee directs the Air Force to terminate any further development of a unique hypervelocity missile design and plan immediately to adopt the Army's missile. The committee denies authorization for the Air Force hypervelocity missile in fiscal years 1990 and 1991.

ADVANCED STRATEGIC MISSILE SYSTEMS

The Advanced Strategic Missile Systems (ASMS) technology program provides the basis for improvements to our existing ballistic missile systems as well as for the development of the next generation of missiles. The program has received ever-declining funding in recent years despite concerns about future Soviet strategic defenses, deeply buried targets, relocatable targets, and the prelaunch survivability of our missile forces. Research and development expenditures for offensive forces will decline significantly in coming years as the modernization program begun in the 1970s comes to fruition; therefore, now is the time to invest anew in promising future technologies that could be made available for development when the time comes to begin another modernization cycle.

For these reasons, the committee recommends adding $20 million to the request for ASMS in fiscal year 1990 and $30 million in fiscal year 1991. The committee recommends that the Air Force allocate these funds for research on low-cost guidance systems, perhaps utilizing external aids, in order to permit dormant peacetime operations, and for maneuvering re-entry vehicle technologies, to include shallow earth-penetration capabilities.

ICBM MODERNIZATION

The committee applauds the administration's efforts to structure a sound ICBM modernization program and recommends full authorization of the requested amounts for the Peacekeeper and the Small ICBM programs. The committee believes it is unwise at this juncture to restrict the flexibility of the Air Force program management to allocate limited funds for the Small ICBM. The committee intends, however, that command, control, and communications (C3), mobility, and basing aspects of the program be pursued at a level necessary to ensure that the missile can be supported and operated when it reaches Initial Operational Capability (IOC) in fiscal year 1997. The administration recently amended its Five Year Defense Plan to include substantial funding for C3, mobility, and basing beginning in fiscal year 1992. The committee is concerned, however, about the level of risk in the current program for C3 integration and about the loss of continuity with present C3 programs. The committee believes that this risk should be eliminated prior to critical design review, that the benefits of continuity should be retained and that the costs of doing so are very modest. The committee, therefore, urges the Air Force to attempt to identify funds within the authorized amount for such risk reduction efforts.

CHEYENNE MOUNTAIN UPGRADES

The General Accounting Office (GAO) has reviewed in detail the several separate programs for upgrading essential warning, assessment, and dissemination functions at the North American Aerospace Defense Command (NORAD). The GAO reports indicate that the Air Force has poorly managed the individual programs and their integration. The committee understands that the Air Force acknowledges these problems, that the Air Force has named a single manager with authority and responsibility for the Cheyenne Mountain upgrades, and that the Defense Acquisition Board (DAB) will review the overall program.

The committee agrees with these arrangements subject to the stipulation that the DAB review will not be a single event; the DAB should establish a series of appropriate milestones for the effort and review the program at each of them. The Under Secretary of Defense for Acquisition is directed to inform the Committees on Armed Services and Appropriations of the Senate and House of Representatives of the results of the first DAB review and the milestones established for the program.

C–17 TRANSPORT AIRCRAFT

The administration requested $915.2 million in fiscal year 1990 for the C–17 transport aircraft program. At the present time, the program has in place or programmed a management reserve of $67.8 million.

The committee recommends authorization of $885.2 million in fiscal year 1990 for the C–17 program, a reduction of $30 million from the request.

FOLLOW-ON TACTICAL RECONNAISSANCE SYSTEM

As a joint service program, the Air Force is developing the Follow-on Tactical Reconnaissance System (FOTARS). FOTARS consists of a common sensor package that can be carried as a pod on F-14 aircraft in the Navy, F-18 aircraft for the Marine Corps, and on unmanned air vehicles and aircraft in the Air Force. The Air Force had proposed to convert F-16 aircraft to replace the RF-4 dedicated reconnaissance aircraft, but the Secretary of Defense suspended that program and directed the Air Force to conduct a comprehensive study of reconnaissance modernization.

The committee questions whether the Air Force will be able to afford dedicated force structure for reconnaissance in the future. The committee notes that the Air Force has deferred modernization of its Wild Weasel squadrons. At some point, the Air Force will have to update its aging F-4G Wild Weasel aircraft. It is questionable whether future budget constraints will permit retaining dedicated Wild Weasel and dedicated reconnaissance squadrons. The Air Force might of necessity adopt the approach of the Navy and Marine Corps and disestablish dedicated force structure for tactical reconnaissance.

The committee believes the Secretary of Defense should conduct a comprehensive assessment of Air Force force structure plans with special emphasis on the need to modernize Wild Weasel aircraft and reconnaissance aircraft. The Secretary should report his findings by February 1, 1990.

AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)

The amended budget request includes $135.1 million for research and development for improvements to the Airborne Warning and Control System (AWACS) aircraft. Of that amount, $67.7 million is requested for continued development of the Radar System Improvement Program (RSIP). For the reasons outlined in the classified annex to this report, the committee recommends that no funds be authorized for the RSIP program. The committee recommends an authorization of $67.4 million for AWACS research and development. Further, the committee directs the Air Force to stop work on RSIP in fiscal year 1989 and not expend the remaining $45 million.

ADVANCED LAUNCH SYSTEM

The committee remains concerned about the fragility and complexity of our current space access systems and about serious deficiencies in satellite survivability and availability. The Advanced Launch System (ALS) seems to offer significant potential for correcting these problems, provided the program is focused on reducing costs, easing the time and rigors of integration and launch, and forcing changes in satellite design, integration, launch, and test.

The committee, therefore, directs the Secretary of the Air Force, in cooperation with the Administrator of the National Aeronautics and Space Administration (NASA), to submit a report to the Committees on Armed Services of the Senate and House of Representatives by April 1, 1990, containing current estimates of development costs for various ALS concepts; the operational benefits expected from such a system; the potential impact on satellite design, costs, and launch responsiveness; and candidates for a first payload. The report shall also include an assessment of the advisability of proceeding with an acquisition program despite the fact that the current heavy launch system is itself new and in the absence of a credible requirement at this juncture for payloads exceeding the capacity of the Titan IV.

The committee notes that the President's report to the Congress on the national space launch program, in its description of ALS program goals, indicates that DoD has imposed a requirement for life-cycle cost effectiveness "across a broad range of projected national requirements." The report adds that this "life cycle cost requirement balances initial investment with uncertain future demand." The Secretary's report should include an assessment of whether this peacetime cost-efficiency standard alone is appropriate for ALS in light of the operational needs currently espoused by the commander-in-chief of the U.S. Space Command.

DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP)

The amended budget request for research and development of the Defense Meterological Satellite Program (DMSP) for fiscal year 1990 is $52.641 million. The committee recommends a reduction to the request of $5 million to defer development of the Block 6 upgrade, which is not planned for first launch until after the turn of the century, pending a report from the Secretary of the Air Force on satellite and satellite data dissemination survivability. The Air Force requirement is for DMSP to be as survivable as the forces it supports. Since the Department of Defense believes that anti-satellite (ASAT) weapons or satellite disruption techniques could be employed in a crisis situation and conventional wars, as well as in nuclear conflict, and since DMSP supports conventional as well as strategic forces, the Secretary's report should explain how critical DMSP Block 6 weather data will be made survivable and should include an estimate of the costs of achieving this survivability. The Secretary's report should be provided to the Committees on Armed Services and Appropriations of the Senate and House of Representatives by March 1, 1990.

PARACHUTE RECOVERY SYSTEMS FOR SMALL AIRCRAFT

Every year the military departments lose expensive electronics components on aircraft because of accidents. The committee is aware of parachute recovery systems for light aircraft in use in civil aviation. These recovery systems might be adaptable for use in helicopters and light training aircraft in the military. The committee encourages the Department of Defense to evaluate such systems as a means of reducing accident damage.

R-1 Line	PE	Program	Revised FY 1990 Request	Senate	
				Change to Request	Authorized
		CHANGES TO DEFENSE AGENCIES RDT&E			
1	61101E	DEFENSE RESEARCH SCIENCES	85,100	10,000	95,100
3	61103D	UNIVERSITY RESEARCH INITIATIVES		15,000	15,000
8	62301E	STRATEGIC TECHNOLOGY	214,709	54,000	268,709
11	62708E	INTEGRATED COMMAND AND CONTROL TECH	34,000	20,000	54,000
12	62712E	MATERIALS AND ELECTRONICS TECHNOLOGY	31,000	52,000	83,000
13	62714E	NUCLEAR MONITORING	24,500	9,800	34,300
16		(SDI-GENERAL)	4,601,904	(300,000)	4,301,904
21	63225D	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVEL	7,933	17,067	25,000
22	63226E	EXPERIMENTAL EVAL OF MAJOR INNOVATIVE TE	167,300	30,200	197,500
23	63227E	RELOCATABLE TARGET DETECTION TECHNOLOGY	21,500	(2,500)	19,000
29	63737D	BALANCED TECHNOLOGY INITIATIVE	206,082	90,000	296,082
34	63756E	CONSOLIDATED DOD SOFTWARE INITIATIVE	32,426	7,500	39,926
37	72807E	INFRARED FOCAL PLANE ARRAY	19,810	5,000	24,810
42	63741D	AIR DEFENSE INITIATIVE	253,151	(100,000)	153,151
57	31011G	CRYPTOLOGIC ACTIVITIES	[ ]	[-7,000]	
58	31301L	GENERAL DEFENSE INTELLLIGENCE PROGRAM	[ ]	[-2,800]	
63	35154I	AIRBORNE RECONNAISSANCE SUPPORT PROGRAM	84,600	(86,600)	(2,000)
66	35159I	DEFENSE RECONNAISSANCE SUPPT ACTIVITIES	36,247	35,000	71,247
69	35885G	TACTICAL CRYPTOLOGIC ACTIVITIES	[ ]	[-10,600]	
		INTEL & COMMUNICATIONS CLASSIFIED	1,253,853	(20,400)	1,233,453
70	63708D	INTEGRATED DIAGNOSTICS	14,501	(14,501)	
72	63790D	NATO RESEARCH AND DEVELOPMENT	96,674	103,326	200,000
73	65104D	TECHNICAL SUPPORT TO USD(A)	23,725	(1,500)	22,225
76	65108D	GENERAL SUPPORT FOR NET ASSESSMENT	3,789	1,220	5,009
83	65119D	GENERAL SUPPORT FOR P&L	3,151	5,000	8,151
87	65801S	DEFENSE TECHNICAL INFORMATION CENTER	25,321	(1,000)	24,321
92	65898E	MANAGEMENT HQ (RESEARCH AND DEVELOPMENT)	16,506	25,000	41,506
		SCIENCE & ENGINEERING EDUCATION		10,500	10,500
		SOLID ROCKET DEMILITARIZATION		6,000	6,000
		HEAVY FORCES COMMON CHASSIS		70,000	70,000
	63229E	X-RAY LITHOGRAPHY		10,000	10,000
		TOTAL RDT&E, DEFENSE AGENCIES		50,112	

R-1 Line	PE	Program	Revised FY 1990 Request	Senate	
				Change to Request	Authorized
		CHANGES TO DEVELOPMENTAL TEST			
1	64940D	TEST INSTRUMENTATION DEVELOPMENT		(15,000)	
		TOTAL DEVELOPMENTAL TEST		(15,000)	
		CHANGES TO OPERATIONAL TEST			
1	64340D	OT&E CAPABILITY IMPROVEMENT		(30,000)	
		TOTAL OPERATIONAL TEST		(30,000)	

R-1 Line	PE	Program	Revised FY 1991 Request	Senate Change to Request	Senate Authorized
		CHANGES TO FY1991 DEFENSE AGENCIES RDT&E			
3	61103D	UNIVERSITY RESEARCH INITIATIVES		15,000	15,000
8	62301E	STRATEGIC TECHNOLOGY	220,300	60,000	280,300
9	62702E	TACTICAL TECHNOLGY	122,656	3,000	125,656
11	62708E	INTEGRATED COMMAND AND CONTROL TECH	38,000	20,000	58,000
12	62712E	MATERIALS AND ELECTRONICS TECHNOLOGY	42,800	50,000	92,800
21	63225D	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVEL	8,205	21,800	30,005
22	63226E	EXPERIMENTAL EVAL OF MAJOR INNOVATIVE TE	158,800	40,000	198,800
29	63737D	BALANCED TECHNOLOGY INITIATIVE	201,410	150,000	351,410
34	63756E	CONSOLIDATED DOD SOFTWARE INITIATIVE	33,600	7,500	41,100
58	31301L	GENERAL DEFENSE INTELLLIGENCE PROGRAM	[ ]	(2,000)	
92	65898E	MANAGEMENT HQ (RESEARCH AND DEVELOPMENT)	17,789	25,000	42,789
		SCIENCE & ENGINEERING EDUCATION		11,000	11,000
		SOLID ROCKET DEMILITARIZATION		7,500	7,500
		AUTHORIZATION CHANGES DEFENSE AGENCIES		408,800	

R-1 Line	PE	Program	Revised FY 1991 Request	Senate Change to Request	Senate Authorized
		FY1991 DEFENSE AGENCIES R&D DEFERRALS			
13	62714E	NUCLEAR MONITORING	25,600		--
14	62715H	DEFENSE NUCLEAR AGENCY	358,669		--
16	63220C	SDI-SURVEILLANCE, ACQUISITION, TRACKING	1,358,889		--
17	63221C	SDI-DIRECTED ENERGY WEAPONS	962,603		--
18	63222C	SDI-KINETIC ENERGY WEAPONS	1,299,365		--
19	63223C	SDI-SYSTEMS AND BATTLE MANAGEMENT	826,167		--
20	63224C	SDI-SURVIV, LETHALITY, AND KEY SUPPORT	648,792		--
35	64220C	PHASE I STRATEGIC DEFENSE SYSTEM	302,000		--
91	65898C	MANAGEMENT HEADQUARTERS (SDI)	27,456		--
40	63711H	VERIFICATION TECHNOLOGY DEMONSTRATION	18,000		--
41	63734K	ISLAND SUN	60,030		--
42	63741D	AIR DEFENSE INITIATIVE	291,055		--
64	35159B	DEFENSE RECONNAISSANCE SUPPT ACTIVITIES	7,375		--
65	35159G	DEFENSE RECONNAISSANCE SUPPT ACTIVITIES	[ ]		--
66	35159I	DEFENSE RECONNAISSANCE SUPPT ACTIVITIES	39,121		--
67	35167G	COMPUTER SECURITY	[ ]		--
68	35884L	INTELLIGENCE PLANNING AND REVIEW	[ ]		--
69	35885G	TACTICAL CRYPTOLOGIC ACTIVITIES	[ ]		--
		INTEL & COMMUNICATIONS CLASSIFIED	1,291,249		1,092,575
		TOTAL DEFENSE AGENCIES R&D DEFERRED		(6,423,796)	

UNIVERSITY RESEARCH INITIATIVE

The administration requested $95 million for the University Research Initiative (URI), which is the same amount that was available to the program in fiscal year 1989. The committee believes that the URI program continues to make important contributions to defense research, and authorizes a total of $110 million for the program in fiscal year 1990 to accomplish the basic aims of the program and to ensure broader participation.

The conference report accompanying the National Defense Authorization Act for Fiscal Year 1989 directed the Department of Defense to broaden the involvement of the overall nationwide science and engineering higher education infrastructure in the URI program. The Defense Department has submitted a plan and has initiated implementation with $5 million from amounts available in fiscal year 1989. The plan calls for funding the broadening effort at $10 million in fiscal year 1990 and $15 million per year thereafter. In order to accelerate the implementation of this plan, the committee is providing an additional $15 million in fiscal year 1990 to be used solely to continue the URI broadening program.

The committee has been very concerned in the past over the issue of the "earmarking" of Department of Defense research funds and has taken a number of actions to reduce or eliminate this practice. Section 220 of the National Defense Authorization Act for Fiscal Year 1989 requires the Secretary of Defense to use competitive procedures in making grants and contract awards to colleges or universities for the performance of research and development, or for the construction of any research or other facilities. In establishing this provision, the conferees intended to restrict legislative earmarking of research funds for colleges and universities and to require competition in the award process. Because of concerns about the manner in which this provision might be implemented, the conferees delayed the effective date for one year (from October 1, 1988 to October 1, 1989) to permit further study and analysis. The committee reviewed the required Department of Defense reports on this issue carefully and subsequently conducted oversight hearings on the overall university research program with testimony received from both Department and outside witnesses.

The committee believes that legislative and executive earmarking should continue to be discouraged in all instances and avoided wherever possible. The committee has determined that under appropriate circumstances, however, it may be in the government's best interest to permit the award of contracts to universities and colleges using the same exceptions to competition applicable to all other entities under the Competition in Contracting Act (CICA). The committee believes, however, that it is necessary to apply safegurads to ensure strict control of the exceptions to prevent indirect earmarking through the award process.

Section 223 amends section 2361 of title 10, United States Code, to permit the award of contracts for research and development programs in accordance with the exceptions to the Competition in Contracting Act (CICA), except for the CICA provision that permits unrestricted legislative earmarkig. To safeguard against unwarranted use of noncompetitive procedures in the award of research contracts to universities, the Department is directed to submit a semi-annual report that lists, for that period, each college and university that has received sole-source contracts with cumulative value greater than $1 million along with the total value of those sole-source contracts. The report should also address, in summary fashion, other Defense Department contracts and grants awarded to universities and colleges using competitive procedures to permit a comparison of the use of competitive and noncompetitive contract activity. The committee intends that competitive procedures will be used for construction of research or other facilities in all instances and that this provision will apply to all funds made available to the Department, including the National Defense Stockpile Transaction Fund.

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

The Defense Advanced Research Projects Agency (DARPA) is the Department of Defense's corporate research organization, chartered with pursuing imaginative and innovative ideas leading to systems with significant military utility. DARPA invests in high-risk technology which, upon maturity, promises to provide a major advance in the military capability of the United States. The committee is convinced that maintenance of the United States qualitative edge is directly related to research into advanced technologies and notes with approval the strong lead that DARPA has taken not only in pursuing high risk defense technology programs but also in acting as a focus for government-industry cooperative efforts such as SEMATECH.

The committee remains disappointed, therefore, in the low level of funding included in the amended budget request for fiscal years 1990 and 1991 for DARPA-managed critical technology programs. Because these programs are vital to developing technologies central to the national security of the United States, the committee recommends the following funding increases: $25 million for gallium arsenide manufacturing technology and insertion; $12 million to maintain the current program in high temperature superconductors; $10 million for the artificial neural network technology program; $10 million for advanced ceramics insertion technology; $12 million for the supercomputer development program; $7.5 million for the Consolidated DoD Software Initiative, and $10 million for the X-ray lithography program.

COOPERATIVE RESEARCH AND OTHER TRANSACTIONS AUTHORITY

The committee recognizes that the maturation of many technologies funded by the Defense Advanced Research Projects Agency may have significant commercial application. The committee applauds the efforts of DARPA in this area and supports a broadening of this effort. Current law does not authorize DARPA to enter into "cooperative agreements" or "other transactions" as distinct from "grants" or "contracts." Additionally, current law does not allow for any proceeds of such arrrangements to be applied to a fund for the development of other advanced technologies. Accordingly, section clearly establishes the legal authority of DARPA to enter into cooperative arrangements and other transactions. In granting the authority to enter into "other transactions", the committee enjoins the Department to utilize this unique authority only in those instances in which traditional authorities are clearly not appropriate.

The legislation would also permit DARPA to recoup the fruits of such arrangements, when there is a "dual use" potential for commercial application, for reinvestment in the development of other technologies with the potential for military utility. The committee further recommends the authorization of $25 million for the establishment of a fund for this purpose with the intention that DARPA should enter into such agreements on a cost-share basis with the private sector under appropriate circumstances.

The committee directs the Secretary to ensure that a review of all DARPA activities is conducted on an annual basis with a view towards terminating those arrangements which do not appear to have a reasonable expectation of success. The committee directs that any cooperative agreement or other transaction entered into between DARPA and other parties be structured to achieve set objectives for a limited duration. This authority should not be used to establish permanent partnerships or other relationships involving continuing financial support from DARPA.

SUPERCOMPUTING

In November 1987, the Federal Coordinating Council on Science, Engineering and Technology (sponsored by the White House Office of Science and Technology Policy) released its report *A Research and Development Strategy for High Performance Computing.* This report outlines a general strategy for improving high performance computing resources by creating a national research network, improving software technology, strengthening basic research, and utilizing human resources. The committee supports the findings contained in this report and notes that the administration is currently reviewing its High Performance Computing Implementation Plan. The committee looks forward to receiving this Plan and working with the administration in support of the Department of Defense's and Department of Energy's roles in this important area.

HIGH RESOLUTION DISPLAY TECHNOLOGY

The committee recognizes the growing importance of electronic driven displays in areas such as flight control, communications, command and control, and battle management. As new high performance computing and digital data transmission capabilities become available for field use, there is an increasing need to fully integrate compatible high resolution displays with these computers and data transmission systems. The committee is aware of efforts in the Executive Branch to explore a national policy for support of the competitiveness of domestic industries involved in the development and manufacture of high definition television, which shares the same technologies as military high resolution displays. Many in industry believe that federal support is required for such an overall effort. The committee would welcome support from other agencies for a broader based program in this area, but believes that increased funding for the DARPA high resolution display technology program is justified based solely on its potential benefits to national security.

The committee endorses the DARPA effort in this technology but believes that the currently planned Defense Department investment of $30 million over the next three years is insufficient to properly sustain this activity. Accordingly, the committee adds $20 million to the fiscal year 1990 DARPA budget to be used for research and development of high resolution display technologies.

The committee notes that the Defense Manufacturing Board (DMB) has been tasked by the Under Secretary of Defense for Acquisition to develop an affordable, comprehensive plan to assure that national security is not jeopardized by the failure of the U.S. to develop a high definition television capability. The committee strongly supports this effort and urges the Department to accelerate the timetable and provide for submission of the DMB report no later than October 1, 1989.

NUCLEAR MONITORING

The Nuclear Monitoring Program of the Defense Advanced Research Projects Agency (DARPA) conducts research and development to enhance U.S. capabilities for monitoring nuclear explosions and remotely detecting the presence of nuclear materials. The committee authorizes $34.3 million for this program in fiscal year 1990, an increase of $9.8 million over the administration's amended defense budget request of $24.5 million, but $3.3 million less than the fiscal year 1989 appropriated level of $37.6 million.

Despite highly promising results from the augmented seismic verification research program begun at the direction of Congress two years ago, the committee notes that the fiscal year 1990 administration request for nuclear monitoring is $11.4 million less than the already reduced fiscal year 1989 spending level of $35.9 million. The committee has been informed by DARPA that the availability of additional funding in fiscal year 1989 was critical to the completion of a long-term cooperative research agreement with the Soviet Union to install and test high-performance seismic sensors in the Soviet Union and the United States. These sensors have the potential to increase our understanding of fundamental geophysical issues associated with earthquake hazard assessment, earthquake prediction, and nuclear test monitoring. A total of seven sensor systems will be installed in the Soviet Union by the end of fiscal year 1989, with the opportunity to install additional stations on a reciprocal basis in fiscal year 1990 and beyond.

The committee recognizes that the most important advancements for monitoring declared Soviet test sites have been in the area of regional monitoring with in-country networks, optimized against particular test sites. Regional data from within the USSR will further improve our capability to estimate yields of Soviet tests if the regional arrays can be located at the optimum locations for each of the three test sites, and to monitor compliance with the current 150 kiloton threshold or reduced threshold limits that may be negotiated in the future. The foremost technical challenge to be addressed by the university research consortium in the U.S.-Soviet cooperative program is that of accurately locating and distinguishing large chemical explosions from potential low-yield decoupled nuclear explosions at declared and undeclared test sites.

The committee notes that these issues can be most effectively addressed by using both fixed and portable in-country stations on a reciprocal basis for the analysis of high frequency signals. The original plan for a series of external seismic research arrays ringing the Western periphery of the Soviet Union was based on an assumed inability to install high-frequency regional monitoring equipment on the national territory of the USSR. The committee notes the possibility that this plan has been superseded by political developments, permitting location of future seismic research arrays in the Soviet Union. In order to make the most economical use of available research funds, the committee directs that installation and operation of one or more low-noise, high-frequency seismic arrays in the Soviet Union take priority over further expenditures for an array located in central Europe. The committee therefore recommends $6.5 million for the U.S.-Eurasian Seismic Studies Program for fiscal year 1990.

DARPA also has the responsibility for providing technical support to the Conference on Disarmament in Geneva, which is sponsoring an international seismic data exchange system for monitoring current and future international obligations to refrain from testing nuclear weapons. U.S. international data center development and communications to other data centers are fully funded under the fiscal year 1990 amended defense budget request. However, the committee believes that DARPA technical support for additional participants in this program can play an important role in furthering both U.S. nuclear nonproliferation and global seismic monitoring objectives; therefore, it recommends an additional $4 million to support this effort.

The current nuclear testing talks offer the opportunity for carrying out on-site inspection measurements at a Soviet nuclear test site. These measurements can be used to characterize the geological conditions in the planned test area in order to pinpoint geophysical variations which might affect yield estimation. The committee therefore recommends an additional $1.5 million for advanced test-site characterization techniques and enhancement of yield estimation methods.

The committee does not recommend an authorization for this program for fiscal year 1991.

STRATEGIC DEFENSE INITIATIVE

In section 231, the committee reduced fiscal year 1990 funding for the Strategic Defense Initiative (SDI) by $300 million in the Department of Defense accounts and by $66 million in the Department of Energy accounts reported elsewhere in this report. This provides a total of $4.5 billion for fiscal year 1990, an increase of 16 percent over the combined fiscal year 1989 funding level. The committee does not recommend a funding level for fiscal year 1991.

The bill also contains several provisions authorizing transfers of, or limiting the obligation of, SDI funds, including:

—authority to transfer up to $100 million in SDI funds from SDI research projects in the Department of Defense to SDI research projects in the Department of Energy;

—authority to expend up to $23 million in SDI research funds to complete the construction of the National Test Bed facility (sec. 231(c));

—authority to continue the program to perfect medical uses for the free electron laser, at a level not to exceed $20 million per year in both fiscal year 1990 and 1991 (sec. 235); and

—authority to expend up to $26.394 million for defense-wide mission support of the SDI (sec. 231(b)).

Consistent with its practice in recent years, the committee chose to allow the Secretary of Defense to allocate reductions in the amended budget request for the SDI program. The committee adopted a provision (sec. 232) directing the Secretary of Defense to submit a report to Congress not later than 90 days after the date of enactment of this legislation specifying the amount of funds allocated for each line-item, project, or activity of the SDI in fiscal year 1990.

The committee considered fences on various elements of the SDI program reflecting the interests and concerns of several members of the committee. The committee agreed not to adopt any such earmarkings in funding the SDI program. However, it strongly encourages that these programs be funded at an appropriate level for fiscal years 1990 and 1991.

SDI DEVELOPMENT AND TESTING RESTRICTION

Appendix C of the 1989 Strategic Defense Initiative Organization (SDIO) report, which was submitted to Congress by Secretary Carlucci on January 19, 1989, contains the following statement: "Currently, no experiment has been approved which would not fall within the categories used in Appendix D to the 1987 Report to Congress on the Strategic Defense Initiative (SDI)."

At a hearing of the Strategic and Nuclear Forces Subcommittee on June 15 1989, Under Secretary of Defense for Policy Paul D. Wolfowitz and Lt. Gen. George L. Monahan, Director of the SDIO, confirmed that this statement means that there are no SDI development or testing activities planned in fiscal year 1990, including long lead acquisition in fiscal year 1990 of material or equipment uniquely required for such development or testing in later years, which would conflict with the agreement on the ABM compliance issue which the Congress worked out with then-National Security Adviser Frank Carlucci in 1987, as reflected in section 225 of the National Defense Authorization Act for Fiscal Years 1988 and 1989.

Under Secretary Wolfowitz and General Monahan also confirmed that none of the SDI experiments which require additional compliance review will entail development or testing in fiscal year 1990, or the purchase in fiscal year 1990 of material or equipment uniquely required for development or testing in later years, that would conflict with the 1987 agreement, as reflected in section 225 of the National Defense Authorization Act for Fiscal Years 1988 and 1989. Finally, the two witnesses affirmed that the 1985 Presidential directive requiring that the SDI program be conducted according to the so-called restrictive interpretation of the ABM Treaty was still in effect.

In light of the aforementioned statement contained in Appendix C of the January 1989 SDIO report, as further clarified by Under Secretary Wolfowitz and General Monahan at the June 15 hearing, the committee adopts a provision (sec. 234) which effectively extends section 225 in the National Defense Authorization Act for Fiscal Years 1988 and 1989 for another year.

The provision specifies that funds provided to the Defense Department for fiscal year 1990 and previous years for the development or testing of ABM systems or components may not be obligated or expended unless such development or testing is consistent with the development and testing described in the January 1989 SDIO report. The committee agrees that "consistent with the development and testing described in the January 1989 SDIO report" means development and testing which does not involve space-based or other mobile-based ABM systems or components.

The provision further specifies that funds provided to the Defense Department for fiscal year 1990 or prior years may not be obligated or expended for the acquisition of any material or equipment (including any long lead materials, components, piece-parts, test equipment, or any modified space launch vehicle) required or to be used for the development or testing of ABM systems or components unless such material or equipment is required for development or testing consistent with the development and testing described in the January 1989 SDIO report.

In adopting this provision, the committee agrees that nothing in this limitation is intended or may be construed to preclude SDIO or contractor planning activities (including studies, design activities, or computer simulations) related to any development or testing of ABM systems or components, including development and testing not described in the January 1989 SDIO report.

In addition, the provision specifies that the Defense Department may request, through normal budgeting procedures, authority to acquire material or equipment related to ABM development or testing not described in the January 1989 SDIO report. The committee directs that such requests would have to be specifically approved by the Congress in the form either of new legislation or congressional approval of a transfer of funds. The committee further directs that no such transfer of any amount take place under this provision without prior notification and congressional approval through the procedures that traditionally have governed transfers.

REPORT OF ASYMMETRIES IN U.S. AND SOVIET ABM PRODUCTION AND CAPABILITIES

In section 907 of the National Defense Authorization Act for Fiscal Year 1989, the Congress directed the President to conduct a study regarding the anti-ballistic missile (ABM) capabilities and activities of the Soviet Union and the ability of the United States to counter a Soviet deployment of a nationwide or more limited ABM system. This provision reflected longstanding congressional concerns about the magnitude of the Soviet strategic defense effort and the possibility of a Soviet breakout from ABM Treaty restrictions. Although this report was due to Congress not later than January 1, 1989, it has yet to be submitted.

The committee remains concerned about continued Soviet noncompliance with the ABM Treaty, its extensive network of large phased-array radars, and its significant in-place ABM production capabilities. The committee, therefore, intends at an early date to hold hearings on the marked asymmetry in U.S. and Soviet near-term capabilities to deploy ballistic missile defenses beyond those permitted under the ABM Treaty—particularly the current state of U.S. ABM production capability and existing missile defense infrastructure. To assist the committee in these hearings, it is essential that the administration delay no longer in submitting the report required by section 907 of the fiscal year 1989 act.

To further assist the committee in this review, the committee approved a provision (sec. 236) which directs the Secretary of Defense, in coordination with the Central Intelligence Agency, to conduct an assessment of this asymmetry and U.S. options for redressing it. The provision requires the Secretary of Defense to submit a report to Congress presenting the results of this assessment not later than the date on which he submits the administration's defense budget request for fiscal year 1991. In addition, the committee recommends that the Department of Defense be prepared to present its preliminary conclusions with regard to this study when the committee holds hearings on the subject later this year.

JOINT DOD–DOE MUNITIONS TECHNOLOGY DEVELOPMENT

The joint DoD–DoE munitions technology development program provides funds to enable the Department of Defense to call upon the highly specialized skills resident in the Department of Energy's three weapons laboratories (Lawrence-Livermore National Laboratory, Los Alamos National Laboratory, and Sandia National Laboratory) for research, consultations, and testing of advanced conventional munitions. The program has been highly successful, and the requests for assistance exceed the available resources. Accordingly, the committee recommends a funding level of $25 million in fiscal year 1990 and $30 million in fiscal year 1991.

SATELLITE LASER COMMUNICATIONS

The committee continues to believe that laser communications technology holds promise for significantly improving command and control of tactical and strategic submarine forces. The committee is encouraged by the cooperative research and development arrangements established between the Navy and the Defense Advanced Research Projects Agency (DARPA) and by advances in technology and system concepts. The committee is aware of several new concepts worthy of further exploration, and recommends adding $10 million to DARPA's request for submarine laser communications research and development for fiscal year 1990 and adding $10 million to the request for fiscal year 1991.

ADVANCED SATELLITE TECHNOLOGY PROGRAM

The committee has been unable to identify generic satellite technology programs in the military departments, and therefore attaches considerable importance to the Defense Advanced Research Projects Agency's (DARPA) advanced satellite technology program. At planned levels, however, the program is inadequately funded. Therefore, the committee recommends adding $25 million to the requested amount for this program in fiscal year 1990 and $30 million to the requested amount in fiscal year 1991.

BALANCED TECHNOLOGY INITIATIVE

The consistent goal of the Balanced Technology Initiative (BTI) program has been to provide the Department of Defense with capabilities to better address obvious gaps in our conventional defense through the application of "leapfrog" technologies; technologies that potentially can render obsolete entire elements of enemy structure on a wholesale basis. The committee started this program in 1987 and held detailed hearings in 1988 and 1989 to review the progress of the program and to assess its value to the national defense. The committee reiterates its strong support for the goals of the BTI program and looks forward to the deployment of weapons systems incorporating improvements developed by this program which will significantly improve the ability of the United States to maintain its qualitative weapons system superiority and our technological leadership.

The committee is concerned, however, that the Department has not placed sufficient emphasis on the Balanced Technology Initiative program as evidenced by the $31 million decrease in its fiscal year 1990 budget request. The committee is further concerned that the Department is not adhering to the program's original goals and objectives and that the Department has not displayed sufficient high level management leadership. The Department testified on June 14, 1989 that it cannot carry out its planned program at its requested funding levels. Based on reports submitted by the Department to Congress, total program requirements are approximately $300 million per year higher than the amounts requested for fiscal years 1990 and 1991. Fiscal constraints and the prior BTI funding profiles preclude funding the program at the planned levels in fiscal years 1990 and 1991. However, to insure strong emphasis and program continuity, the committee adds $90 million to the program for fiscal year 1990 and $150 million for fiscal year 1991 with the intention of providing adequate funding to continue to pursue worthwhile projects. The committee believes these additions in fiscal year 1990 and 1991 funds should provide a strong foundation for planning and executing the program. The committee will continue to closely monitor the management and execution of this program, however, and will reassess the proper funding level for fiscal 1991 after the BTI hearing planned to be held next year.

The committee again intends that no portion of the funds provided for BTI be applied to any program, project or activity in support of the Strategic Defense Initiative.

The committee believes that a review of the overall program relative to its original goals is warranted. Accordingly, the committee directs the Secretary of Defense to take the following actions. First, the Defense Department is directed to use a portion of the available BTI funds to conduct a continuing analysis of current Soviet/Warsaw Pact warfighting capabilities and other potential hostile threats and determine those areas most vulnerable to a technological breakthrough. The techniques and results of the Department's Competitive Strategies program should be used as the starting point for this analysis. The analysis should be performed using the most current available intelligence information and performed in coordination with the Office of the Joint Chiefs of Staff (OJCS), the unified combatant commanders and the Central Intelligence Agency. The results of this analysis should be included in the annual BTI report to the Senate and House Committees on Armed Services. Second, the Department should compare the results of the vulnerability analysis with technology development programs that the United States and its allies are conducting. Those technologies that have a high potential to exploit identified Soviet force structure vulnerabilities should be considered for priority support and designation for inclusion in the Defense Department's Critical Technologies Plan under section 8xx of this Act. Third, to ensure that current and future BTI projects meet the goals of the program, the Director of Defense Research and Engineering shall establish an independent review group to examine the status of each BTI project and its potential to make a significant advance in warfighting ability. While recognizing that many interesting candidate programs exist, the Department should exercise a vigorous culling process to eliminate those programs which do not exhibit adequate progress or promise so that programs with greater potential can be supported. The committee has maintained from the outset that the BTI program should not be viewed as a vehicle to fund marginal programs that do not qualify for funding elsewhere. The committee has further stated that programs which, after review, do not show the promise initially expected should be discontinued.

The committee understands that the success of the BTI program is critically dependent on the role that the Department's senior leadership takes in its overall management. The committee is disturbed by the apparent lack of management leadership at the Director of Defense Research and Engineering and higher levels. The original legislation establishing the program makes the Director of Defense Research and Engineering directly responsible for identifying ongoing research efforts that should be augmented, consolidated or otherwise included in the program. The Director is also responsible for identifying and managing critical technology development efforts that support this program. The committee believes the Director is responsible for insuring that a continuing critical review of all projects included under the BTI program occurs, and those projects that do not show adequate progress or promise are removed. The natural tendency of those responsible for the day-today management of programs such as BTI is to retain individual projects, once selected, even when it becomes apparent that other avenues of research might have greater potential. It is higher management's responsibility to redress this tendency through close involvement, independent assessment, and regular reviews. Further, the Director is responsible for insuring that all projects included under the BTI program have adequate funding even if that results in terminating projects that otherwise would be continued. The committee again urges the Secretary of Defense and the Director of Defense Research and Engineering to take all steps necessary to provide proper guidance and management to this program and permit it to attain its original goals and objectives.

SEMICONDUCTOR MANUFACTURING TECHNOLOGY

The committee notes the excellent progress made by the SEMA TECH consortium during the past year. The Advisory Council on Federal Participation in SEMATECH has recommended continuation of federal funding for SEMATECH at the present $100 million level for fiscal year 1990. The committee supports this recommendation.

Competitive manufacture of semiconductor devices, other than the semiconductor devices which will be produced using technologies developed by the SEMATECH consortium, also requires attention if the United States is to regain international leadership in this crucial manufacturing sector. The DARPA program to manufacture application-specific integrated circuits promises to provide the means to manufacture the diversity of these chips at low volumes in flexible facilities and cost only a fraction of the high-volume semiconductor facilities. The committee recognizes the importance of a balanced semiconductor manufacturing capability and increases funding to DARPA by $10 million to support this initiative.

WIDE AREA SURVEILLANCE PROGRAMS

The committee has a number of concerns about current and planned programs for early warning/attack assessment and tracking of air-breathing threats for continental air defense, fleet air defense, and defense of U.S. and allied forces and territory abroad. Threats include tactical aircraft, naval and strategic bomber, air- and submarine-launched cruise missiles, and small aircraft involved in drug trafficking.

Each of these threats presents difficulties today, and the threat will increase in the future. Counting rules under a START treaty, on-going Soviet bomber research and modernization programs, the advent of low-observable technologies, and continued quieting of Soviet submarines—all point to an increasing threat to the continential (CONUS), in size and sophistication. Drug interdiction and fleet air defense problems are also serious and well-documented.

There are many programs in research and development and procurement in the Air Force, Navy, Office of the Secretary of Defense, and non-DoD agencies and departments addressing these airborne threats. The committee is concerned that these various programs have not been considered in an integrated manner to optimize the nation's efforts and ensure that threats are effectively countered at acceptable cost.

The Air Force and Navy have competing concepts for space-based world-wide surveillance and tracking. The proposals are for relatively near-term deployment at considerable cost. Yet, the ability of these proposed systems to detect and track advanced, low-observable threats reliably is doubtful.

For several years, the Congress has directed the Air Defense Initiative (ADI) to focus its resources on technologies for early warning/attack assessment of advanced threats; instead, ADI has devoted the preponderance of its resources to battle management and engagement capabilities and to systems requiring initial detection from some other source.

The Navy is procuring the Relocatable Over the Horizon Radar (ROTHR) system at a very low rate, such that a space-based surveillance system, if pursued, might be deployed before ROTHR procurement is even complete. A viable space-based system may well obviate the need for ROTHR as well as other surveillance programs.

DoD has decided to terminate two of the four subsectors of the Central Over the Horizon-Backscatter (OTH–B) sector for budgetary reasons. The committee questions the choice of subsectors to be deployed on military grounds. Also, the southeast subsector appears redundant given the plethora of other radars fielded or planned for the Caribbean area. The Air Force also has not identified resources or developed plans to upgrade the East and West coast sectors to achieve maximum capabilities against cruise missiles.

In light of these concerns, the committee takes the following positions:

1. *Wide Area Surveillance Study and Report.*—The Secretary of Defense is required to conduct a comprehensive study of wide-area warning, assessment, and tracking and report the results to the Committees on Armed Services and Appropriations of the Senate and House of Representatives by March 1, 1990. The report must address, at a minimum, the projected air threat to CONUS, the Navy, and U.S. forces abroad; required capabilities of warning and tracking systems; shortfalls in current and planned systems; technologies and resources to address these shortfalls; interoperability and redundant coverage of various DoD and non-DoD surveillance systems; and the specific relationship between OTH–B, ROTHR, ADI programs, the Caribbean Basin Radar, the Federal Aviation Administration (FAA) radar upgrade, theater surveillance programs (such as the Airborne Warning and Control System (AWACS) upgrade), national-level sensors that contribute to warning, assessment, and tracking, and non-DoD programs. In addition, the study should analyze management and oversight arrangements to ensure that requirements will be met and redundancy is avoided.

2. *OTH–B.*—The committee expects DoD (a) to review the choice of OTH–B Central Sector subsectors prior to the submission of requests for funds for actual construction and (b) to identify requirements and resources to exploit fully the East and West coast sectors' capabilities for detecting and tracking small and advanced targets.

3. *Space Based Wide Area Surveillance.*—The committee serves notice that it is unlikely to approve for engineering development a program that does not demonstrate a clear and convincing growth

potential for tactical warning/attack assessment of potential future advanced cruise missiles and low-observables aircraft.

4. *ADI.*—For the last two years, Congress has admonished DoD to ensure that tactical warning/attack assessment of advanced air-breathing threats to CONUS is the priority focus of the Air Defense Initiative. Despite this repeated guidance, the majority of the request this year for the program is for R&D on an airborne radar concept, which on a day-to-day basis would require cueing by an initial detection system. The funding request for research on concepts for initial detection, in contrast, is meager at best. Consequently, the committee recommends a reduction of $100 million to the requested amount, which would fund the program at last year's level. The committee expresses strong support for the program given its vital importance to addressing current and advanced threats, but does not intend to increase funding for this program until the requisite tactical warning/attack assessment capabilities have been identified and included in the program.

5. *Caribbean Basin Radar.*—Redundancies appear to exist in the radar coverage of the Caribbean Basin region both within the Caribbean Basin Radar program and between this system and other wide-area surveillance systems. The committee recommends a reduction of $11 million to the requested amount for fiscal year 1990, which delays the acquisition of one radar pending completion of the study and report described above.

AIRBORNE RECONNAISSANCE SUPPORT PROGRAM

The committee notes with disappointment the activities of the Airborne Reconnaissance Support Program (ARSP). The committee was instrumental in its creation two years ago. The committee believed that a single point of focus was required in the Department of Defense to manage all aspects of airborne reconnaissance. The Department chose to limit ARSP activities solely to advanced research and development activities and gave it no role in the day-to-day operation of existing forces. Further, the committee notes that all of the major airborne reconnaissance development programs have been effectively terminated during the past two years with virtually no input from the very organization that was chartered to guide the Department in this area. Consequently, the committee recommends termination of the ARSP program. The committee recommends that ongoing activities within the ARSP office be transferred to other accounts. Additional views of the committee are provided in the classified annex to this report.

SKYDANCER

Congress directed the Secretary of Defense to establish a Joint Unmanned Air Vehicle Program Office to consolidate requirements, resources, and programs for all the services for all unmanned air vehicles. The Skydancer program has not been incorporated in the joint program, its program requirements remain undefined, and the payload is incompatible with other joint vehicle programs. Moreover, the system will not be interoperable with major related programs, such as TR-1, Guardrail, and the commander's tactical terminal. For these reasons, the committee recommends termination of the program and the transfer of any residual assets to the Joint Unmanned Air Vehicle Program Office.

ALLIED COOPERATIVE RESEARCH AND DEVELOPMENT

Sections 1103 and 1105 of the Department of Defense Authorization Acts for Fiscal Years 1986 and 1987 established a framework for cooperative research and development between the United States and its NATO and major non-NATO allies. The committee has strongly supported this important effort to reduce the wasteful duplication of defense research by the U.S. and its allies.

Cooperative projects carried out within this framework should eventually yield more common military equipment. Moreover, each country's share of a collaborative project's cost will be far less than the cost that each country would have incurred if it had undertaken the project by itself. For example, Mr. James Compton, the Assistant Deputy Under Secretary of Defense (Industrial and International Programs), testified before the committee in June 1989 that the U.S. investment in cooperative projects over the next five years will be about $3 billion. Over the same period of time, our allies will collectively contribute almost double that amount.

From the outset of the cooperative research and development program, the committee has consistently recommended an annual authorization of $200 million for the U.S. share of new cooperative projects. The committee proposes the same level of funding for each of fiscal years 1990 and 1991.

By its very nature, cooperation between two or more countries in the research, development, and production of common military equipment is very difficult to initiate and implement. Although they may be defense allies, each country has different military requirements, industrial interests, and planning and financial processes. In order to overcome these impediments to collaboration, the cooperative research and development program should be as stable and efficient as possible. A steady, predictable level of funding has made an important contribution to the success of the program.

A total of 26 cooperative projects are now underway within the framework of the cooperative research and development program. The committee is encouraged that such a large number of projects have been started since the program was established four years ago. However, the Office of the Secretary of Defense recently authorized the military Services to initiate negotiations with our allies on 27 new projects. Although some of these new projects may not eventually be implemented within the cooperative research and development program, the committee is concerned over both the number and the purpose of these candidate projects. For example, some of the projects appear to offer only limited military value that would fall far short of the payoff envisioned by the committee when it began the overall program four years ago. Moreover, a few of the projects seem to be focused on the continental defense of North America rather than on the defense of the NATO alliance.

With 26 projects already underway, it would be appropriate at this time to consolidate the success of the program by concentrating less on the *quantity* of new projects and more on the *quality*. The committee urges the Department of Defense to pursue more substantial military systems as candidates for cooperation between the U.S. and its allies. Even though this approach would result in relatively fewer cooperative projects, it would yield a higher payoff from the limited funds available for the cooperative research and development program. It would also encourage the military Services to accept further the concept of collaboration with our allies as a potentially effective method to acquire their high priority systems.

In the past, the committee has expressed concern that cooperative projects not be duplicated by projects that the United States is carrying out by itself. The danger is that a cooperative project could be made obsolete before it is fielded by a highly classified and more sophisticated U.S. project. The result would be a waste of hard-won money, time, and credibility. Accordingly, the committee reiterates its guidance to the Defense Department to ensure that cooperative projects involve technologies that are sufficiently advanced to make a meaningful contribution by the time they are actually fielded.

In addition to a funding level of $200 million, the committee recommends a provision that codifies in a single section of title 10 of the United States Code the two separate sections of law that now authorize the NATO and non-NATO parts of the cooperative research and development program. After four years, the program is now established enough to justify its codification in title 10.

The only substantive change that would be made in the new statute is to add a requirement for an annual report on the program by the Under Secretary of Defense for Acquisition. The committee encourages the Under Secretary of Defense for Acquisition to be forthcoming and comprehensive in identifying and describing the projects to be carried out under the program. In addition to projects for which memoranda of understanding (MOUs) exist, this report should include those projects that the Office of the Secretary of Defense has identified as potential candidates for MOUs.

SOLID ROCKET DEMILITARIZATION RESEARCH AND DEVELOPMENT

The committee believes that the Department of Defense is directing insufficient attention to research and development activities for the demilitarization of solid propellant rocket motors of all types in an environmentally benign manner. The current approach, open detonation or static firing, is not an environmentally acceptable approach to demilitarize these solid propellant rocket motors; however, no other environmentally acceptable approach has been demonstrated.

The committee is aware of alternate technologies that are being investigated at a moderate level of effort by the military services which may provide the desired capability. The committee believes that these efforts should be coordinated and given overall management by the Director, Defense Research and Engineering (DDR&E). The committee directs the Director to establish a consolidated environmentally benign solid rocket demilitarization research and development program and, to implement this activity, adds $6 million and $7.5 million to the amended defense budget requests for fiscal years 1990 and 1991, respectively.

INFRARED FOCAL PLANE ARRAY PRODUCIBILITY PROGRAM

The Defense Advanced Research Projects Agency (DARPA) infrared focal plane array producibility program is focused on making infrared focal plane array systems more producible and affordable, a key to their successful future employment. The committee believes that use of infrared focal plane array technology is essential to maintaining future U.S. national security and fully supports the development of the technology and the manufacturing processes that support it. The committee recommends increasing funding for the DARPA program on infrared focal plane arrays by $5 million above the amount proposed in the amended defense budget request for fiscal year 1990.

DEFENSE MANUFACTURING TECHNOLOGY

The Defense Department's Manufacturing Technology (MAN TECH) program has a proven track record of providing substantial increases in productivity, quality, competitiveness, and responsiveness of the U.S. industrial base. Nevertheless, the amended defense budget request for fiscal year 1990 decreased overall funding for MANTECH programs below that funded in fiscal year 1989. The Air Force, designated as the lead Service for this major focus area, decreased its fiscal year 1990 funding request by $25 million from that funded in fiscal year 1989. The committee therefore finds it necessary to again increase funding in this area by a total amount of $60 million for all Services and Agencies. Of this amount, $30 million is specifically included to support the Defense Advanced Research Project Agency's (DARPA) MANTECH funding of the DARPA Initiative on Concurrent Engineering (DICE) program. Further, funds appropriated shall be considered the minimum amount for the program, and the MANTECH program shall be protected from undistributed funding reductions.

In recognition of the commitment made by the President in the December 16, 1986 domestic action plan for the machine tool industry, the Department of Defense has supported the private sector National Center for Manufacturing Sciences (NCMS) at a level of $5 million each year for fiscal years 1988 and 1989. The committee continues to support the NCMS and authorizes $5 million for fiscal year 1990.

The committee supports Navy MANTECH efforts to establish a Center of Excellence for Composites Manufacturing Technology. This program involves a collaborative effort with academia, industry, and government in the transfer of existing technology, as well as in the development of new cost-effective materials, processes, and equipment. The committee directs the Navy to provide $5 million in each of its fiscal year 1990 and 1991 MANTECH budgets to allow for the establishment of the Center of Excellence for Composites Manufacturing Technology on a competitive basis no later than the end of the second quarter of fiscal year 1990. The committee further urges the Navy to carefully review the merits of establishing a Center of Excellence for Advanced Flexible Manufacturing Systems that could serve as a national demonstration project and model for the development and transfer of new manufacturing technologies in support of Navy and other Department of Defense needs. The Navy may use such funds as are authorized by the committee for the Navy MANTECH program to provide for such a Center.

The committee supports DARPA's Composite Materials program and directs that a cooperative venture be established, on a competitive basis, with a U.S. manufacturing company having demonstrated experience in materials technology, to develop a continuous fiber metal matrix composite model factory. The committee further directs that funding, not to exceed $7 million in fiscal year 1990, be allocated from the amounts authorized by this committee for the materials and electronics technology program element of the DARPA budget.

The committee continues to be concerned over the apparent lack of a centralized DoD management of the MANTECH programs. The current approach, with each military department planning and managing its own effort on an essentially independent basis, will not achieve the maximum benefits that should be obtained from the program as a whole. The committee strongly urges the Under Secretary of Defense for Acquisition to establish an effective top-down management structure for this program, including the strategic planning that integrates the efforts of all participants and elements of the program. The committee intends to review the Department's approach to instituting the top-down management structure at a hearing to be conducted at a future date.

The committee notes the excellent support provided by the Defense Manufacturing Board (DMB) to the Defense Department and strongly endorses its continued involvement. The committee urges the Secretary of Defense to upgrade the charter and level of support of the DMB to equal that of the Defense Science Board.

SECURITY AT THE KWAJALEIN TEST RANGE

The committee is concerned about the security of sensitive activities at the Kwajalein test range. These concerns stem from the persistent failure of the Defense Department to adequately fund security programs at the Kwajalein test range, as well as the volume and importance of the activities conducted there. The committee notes that the Kwajalein test range is presently scheduled to host tests by the Army Strategic Defense Command, the Air Force Ballistic Missile Office, the Strategic Defense Initiative Organization, the United States Space Command, the Defense Nuclear Agency, the National Aeronautics and Space Agency, the United States Navy, and other organizations.

In response to its concerns, the committee directs the Department of the Air Force, which is the primary user of the Kwajalein test range, to transfer to the Department of the Army not less than $5 million for the sole and exclusive purpose of funding the highest priority security improvements at the Kwajalein test range. The committee also directs that $2.5 million be set aside by the Army for the same purpose. The Army funds set aside for this purpose shall not come from the budget of the U.S. Army Kwajalein Atoll Command.

RESTORATION OF CERTAIN REPORTING REQUIREMENTS IN THE CHEMICAL AND BIOLOGICAL WARFARE DEFENSE PROGRAMS

The committee recommends a provision (sec. 243) amending section 602 of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, to restore four reporting and notification requirements related to chemical and biological warfare (CBW) defense programs that were inadvertently deleted by this legislation: (1) annual report on CBW expenditures for research, development, test and evaluation (RDT&E) of CBW agents; (2) report on an emergency disposal of CBW agents that were not detoxified or otherwise made harmless; (3) prior notice to Congress of any DoD experiment or study involving the use of human subjects to test CBW agents; and (4) prior notice to local officials of any test or experiment involving the use of any CBW agent on civilian populations.

The committees believes the annual report on CBW expenditures is necessary to exercise meaningful oversight of this program. The committee directs the Secretary of Defense to provide it with the annual report on CBW agency RDT&E expenditures in fiscal year 1988 which was prepared by the Department of Defense but not submitted to Congress. The other three reports, which will rarely, if ever, need to be filed, are essential to keeping Congress and the public informed of CBW emergencies and controversial experiments.

PRODUCT DATA EXCHANGE SPECIFICATION

Recognizing that the establishment of a Product Data Exchange Specification (PDES) is an important building block to increase our overall competitiveness in the global marketplace, the committee directs the Department of Defense to continue to assist in the establishment of a national consortium in PDES. This initiative will provide for acceptance of implementation standards enabling compatibility and communication of product data among industry and government programs. PDES will accelerate implementation of important technologies like those related to the DoD Computer-Aided Acquisition and Logistics Support (CALS) program. A consortium of industry and government organizations in PDES will have a profound effect on the U.S. defense commercial industry.

TITLE III—OPERATION AND MAINTENANCE

The President's defense budget request for fiscal years 1990 and 1991 included $90,198.5 million for operation and maintenance of the armed forces and the component agencies of the Department of Defense in fiscal year 1990, and $94,041.8 million in fiscal year 1991.

For fiscal year 1990, the committee recommends authorization of $87,781.5 million for the operation and maintenance (O&M) accounts, a reduction of $2,417 million from the budget request. Within this $2,417 million overall reductions, $2,416.3 million is recommended for transfer to other accounts.

For fiscal year 1991, the committee recommends authorization of $90,899 million, a reduction of $3,142.8 million from the budget request. Of this reduction, $3,095 million is recommended for transfer to other accounts.

In reviewing the operation and maintenance accounts, the committee attempted to identify those areas of the budget where funding shortfalls could cause readiness and sustainability problems in the future, and, where possible, to find offsets in lower priority programs to increase funding in these areas. Where reductions were necessary, the committee made the reductions as broad and generic as possible in order to give Defense Department managers flexibility to implement the reductions.

The committee's adjustments to the fiscal year 1990 operation and maintenance accounts are summarized below:

FUNDING ADJUSTMENTS

Depot Maintenance.—The backlogs of depot maintenance have grown dramatically in the military services in recent years. From fiscal year 1989 to fiscal year 1990, the total Department of Defense backlog increases by almost 50 percent, and increases by another 8 percent in fiscal year 1991. In addition, recent storm damage at Fort Hood, Texas has resulted in significant increases in Army depot maintenance requirements. The committee recommends increases of $100 million in the Army and $65 million in both the Navy and Air Force for depot maintenance activities.

Real Property Maintenance.—Funding for real property maintenance activities continues to fall further behind annual requirements in all of the military services. The backlog of maintenance and repair of real property for the whole Department of Defense increases by 25 percent from fiscal year 1989 to fiscal year 1990, and increases by another 17 percent in fiscal year 1991. From fiscal year 1988 to fiscal year 1991, the backlog grows by 80 percent. The committee recommends an increase of $200 million for real property maintenance activities to slow the growth of the backlog in this area.

Civilian Pay Raise.—The administration's amended budget requested a 2 percent pay raise for federal civilian employees in fiscal year 1990. Since submission of the budget amendment, Congress and the administration have agreed on a 3.6 percent pay raise for federal civilians in fiscal year 1990. The committee recommends an increase of $219.4 million to the $495.5 million requested in the operation and maintenance title for civilian pay costs. This level will provide 80 percent of the cost of the civilian pay raise in this title, meaning the Department will have to absorb 20 percent of the total cost of the 3.6 percent increase.

Army Supply Operations.—Supply operations encompass depot operations, inventory control points, and the receipt, storage and issue of munitions. Testimony before the committee indicated that underfunding of this activity in both fiscal year 1989 and fiscal year 1990 was the Army's single most critical logistics shortfall. The committee recommends an increase of $45 million for this activity, which includes $1.4 million for continued support of the Defense Standard Ammunition Computer System (DSACS) at the Army's Armament, Munitions and Chemical Command.

Navy Recruiting.—Since 1959 the Navy has had a seapower exhibit in the Museum of Science and Industry in Chicago, Illinois. This exhibit is now over 30 years old, and the technology in the exhibit is outdated. The Navy has indicated that an updated exhibit which accurately portrays the Navy's use of high technology in defense of the nation will be a substantial recruiting and public information asset in the Midwest. The committee recommends an increase of $2.0 million to the Navy's recruiting budget to allow the Navy to enter into a cooperative effort with the Museum of Science and Industry to renovate and update this seapower exhibit.

Transfer of Management of the Pentagon from GSA to DoD.—As discussed in the military construction section of the report, the committee recommends a provision transferring management of the Pentagon from the General Services Administration (GSA) to DoD. This provision results in savings of $38.9 million in the appropriate operation and maintenance accounts because of reduced charges normally paid to GSA for rent.

Foreign Currency.—Since submission of the amended fiscal year 1990 request, the U.S. dollar has been increasing in value compared to various foreign currencies. The committee recommends a reduction of $354.0 million to the foreign currency-related programs to reflect this improvement.

Base Closure Account.—The committee recommends a reduction of $200 million to the fiscal year 1990 budget request for the Base Closure Account based on testimony by the base closure commissioners that this amount was the minimum necessary for this account in fiscal year 1990.

Navy Stock Fund Transfer.—The committee recommends a reduction of $100 million to the Navy operation and maintenance request to be offset by a transfer of $100 million in excess cash that has built up in the Navy Stock Fund.

Industrial Fund Passthrough.—The amended fiscal year 1990 request included depreciation costs in the Army and Air Force Industrial Funds in excess of the amounts identified by the services for the Asset Capitalization program. The anticipated additional revenues from these depreciation costs can be used to offset by $72.1

million the requested passthrough of $672.0 million in appropriated funds for the Army and Air Force Industrial Funds.

Command, Control and Communications.—This category of operation and maintenance costs includes support of the communications and associated command and control efforts of DoD. This category has one of the highest growth rates of any category of operation and maintenance costs. Base communications costs, for example, which include local telephone services, local leased communications, closed circuit radio/television systems, range communications, and similar services, increase by approximately 10 percent, or $110 million, in fiscal year 1990. The reduction of $45 million recommended by the committee in this area will still allow program growth in fiscal year 1990.

Claims.—The Army requested an increase of $8.8 million to pay the costs of adjudicated claims in fiscal year 1990, including costs of claims by foreign governments for military maneuver damage. The General Accounting Office (GAO) has indicated that the Army is moving to improve their procedures for reviewing military maneuver damage claims in Europe. Also, the cancellation of Reforger 89 redeployment should reduce the incidence of maneuver damage claims in Europe. The reduction of $8.8 million recommended by the committee will hold the fiscal year 1990 Army claims budget at the fiscal year 1989 level.

Administration.—This category of operation and maintenance costs provides for administrative support of departmental and major administrative headquarters and field commands. This includes the Office of the Secretary of Defense, Organization of the Joint Chiefs of Staff, support for Service Chiefs, the Secretaries of the Departments, operation of Service-wide accounting and finance activities, and personnel management-related activities to enhance career development and retention. It also includes activities which exercise direction, technical management and control of data automation programs, and other activities such as internal audit, legal services, and operation of inspection and safety centers. Funding for this category of costs in fiscal year 1990 increases by 17 percent, or approximately $467 million, over the fiscal year 1989 level. The committee recommends a reduction of $40 million to reduce program growth in this area in fiscal year 1990.

SR-71 Fleet.—The committee recommends continued operation of the SR-71 fleet through fiscal year 1990. This item is discussed in greater detail in the classified annex to this report.

Sound Ocean Surveillance System (SOSUS).—The committee recommends a reduction of $8 million to the Navy's SOSUS program.

Classified Programs.—The committee recommends a series of adjustments to classified programs in fiscal years 1990 and 1991 which are discussed in the classified annex to this report.

U.S.S. Enterprise Refueling and Modernization.—The amended fiscal year 1990 request includes $106.0 million in O&M, Navy to begin the refueling and modernization (REMOD) of the U.S.S. *Enterprise* in fiscal year 1991. As discussed under the Shipbuilding and Conversion, Navy section of this report, because of the nature of this effort, the dollar value, and the time required for this activity, the committee believes that the *Enterprise* REMOD is more appropriately funded in the Shipbuilding and Conversion, Navy account. The committee recommends a transfer of $106.0 million in fiscal year 1990 and $840.5 million in fiscal year 1991 from the Operation and Maintenance, Navy account to the Shipbuilding and Conversion, Navy account.

Asset Capitalization Program.—The Asset Capitalization Program (ACP) provides for modernization of equipment in Defense Department industrial facilities. Industrial activities finance the cost of equipment and then charge their customers for work performed. These activities recover the cost of equipment by including depreciation expense in the charge to their customers.

At the request of the Subcommittee on Readiness, Sustainability and Support, the General Accounting Office conducted a review of the ACP in DoD. GAO concluded that this program is important for the modernization of DoD industrial facilities. However, GAO also concluded that there were weaknesses in the management, oversight and implementation of the ACP in DoD.

GAO concluded, for example, that the Office of the Secretary of Defense (OSD) has provided limited or unclear and conflicting guidance on what can be purchased with ACP funds; that when OSD or Service guidance was specific, it was sometimes not followed; and that the Services have not yet adequately implemented the elements of a sound capital investment program. GAO also noted that the increasing value of nondiscretionary purchases, which GAO defined as service- or command-directed projects, for such items as management information systems, coupled with funding reductions, have restricted the activities; ability to buy needed plant equipment in recent years.

GAO noted that at the time of its review, OSD had no functional manager for ACP, and recommended that OSD assign functional oversight responsibilities for ACP to the staff of the Assistant Secretary of Defense (Acquisition and Logistics). The committee endorses this recommendation, and urges this functional manager to review what GAO termed the large, nondiscretionary service- or command-directed projects.

Finally, the committee recommends the transfer of ACP funds in each of the services back to the Other Procurement accounts. The committee believes this transfer will give OSD management and the Congress better visibility over this program, and will allow ACP projects to compete for funds with other capital investment projects in the military Services.

Installation of Modifications.—Currently the Defense Department budgets for the installation of equipment to modernize weapons systems in the O&M accounts, but actually purchases the equipment for these modifications in the Procurement accounts. The committee consolidates funding for the installation and purchase of modifications in the Procurement accounts to provide better management and oversight of weapons system modification costs. This action results in a transfer of $1,720.0 million in fiscal year 1990 and $1,696.2 million in fiscal year 1991 from the O&M to the Procurement accounts.

Inactive Army Ammunition Facilities.—The committee believes that funding for the upkeep and repair of the inactive Army ammunition base should be transferred to the Procurement of Ammunition, Army account. This action will help provide the necessary management to ensure that the maintenance and modernization requirements of the inactive ammunition base are dealt with in a manner consistent with ammunition priorities throughout the ammunition production base. The committee recommends a transfer of $71 million in fiscal year 1990 and $75 million in fiscal year 1991 from the O&M, Army account to the Procurement of Ammunition, Army account.

The following tables summarizes the committee's recommended adjustments to each of the operation and maintenance accounts for fiscal years 1990 and 1991.

OPERATION AND MAINTENANCE
Fiscal Year 1990
Adjustments by Account
(Dollars in Thousands)

	ARMY	NAVY	MARINE CORPS	AIR FORCE	DEFENSE AGENCIES	INSPECTOR GENERAL	ARMY RESERVE	NAVY RESERVE	MARINE CORPS RESERVE	AIR FORCE RESERVE	ARMY NATIONAL GUARD	AIR NATIONAL GUARD	RIFLE PRACTICE, ARMY	U.S. COURT OF MILITARY APPEALS	ENVIRONMENT RESTORATION DEFENSE	GOODWILL GAMES	HUMANITARIAN ASSISTANCE	BASE CLOSURE	TOTAL
BUDGET REQUEST	23,700,600	25,954,600	1,716,300	22,812,200	8,021,600	95,800	861,900	980,000	77,400	1,004,600	1,870,200	2,041,200	4,700	4,000	517,800	14,600	13,000	500,000	90,190,500
Foreign Currency	(177,900)	(44,400)	(25,500)	(84,400)	(21,800)														-354,000
Stock Fund Cash		(100,000)																	-100,000
Real Property Maintenance	60,000	60,000	15,000	60,000	5,000														200,000
Command,Control and Communications	(20,000)	(10,000)			(10,000)							(5,000)							-45,000
Administration	(10,000)	(5,000)		(10,000)	(15,000)														-40,000
Claims	(8,800)																		-8,800
Industrial Fund Passthrough	(15,400)			(56,700)															-72,100
Recruiting		2,000																	2,000
Civilian pay raise	67,200	69,200	4,000	41,700	20,100	400	2,400	500	100	3,000	5,300	5,500							219,400
Supply Operations	45,000																		45,000
Depot Maintenance	100,000	65,000		65,000															230,000
Base Closure																		(200,000)	-200,000
Pentagon Transfer	(12,400)	(4,700)		(9,000)	(12,800)														-38,900
SR-71				211,000															211,000
SOSUS		(8,000)																	-8,000
Asset Capitalization Program	(59,100)	(351,900)	(3,400)	(75,000)	(29,900)														-519,300
ENTERPRISE Remod		(106,000)																	-106,000
Modification Installation	(143,700)	(1,161,300)	(5,900)	(245,300)				(84,800)		(25,700)		(53,300)							-1,720,000
Ammunition Plant Maintenance	(71,000)																		-71,000
Classified Programs	(800)	(1,300)			(39,200)														-41,300
TOTAL	23,453,700	24,358,200	1,700,500	22,709,500	7,926,000	96,200	864,300	895,700	77,500	981,900	1,875,500	1,988,400	4,700	4,000	517,800	14,600	13,000	300,000	87,701,500

OPERATION AND MAINTENANCE
Fiscal Year 1991
Adjustments by Account
(Dollars in Thousands)

	ARMY	NAVY	MARINE CORPS	AIR FORCE	DEFENSE AGENCIES	INSPECTOR GENERAL	ARMY RESERVE	NAVY RESERVE	MARINE CORPS RESERVE	AIR FORCE RESERVE	ARMY NATIONAL GUARD	AIR NATIONAL GUARD	RIFLE PRACTICE, ARMY	U.S. COURT OF MILITARY APPEALS	ENVIRONMENT RESTORATION DEFENSE	GOODWILL GAMES	HUMANITARIAN ASSISTANCE	BASE CLOSURE	TOTAL
BUDGET REQUEST	24,876,900	27,287,800	1,775,500	23,545,100	8,318,900	97,600	902,600	1,017,000	79,400	1,041,300	1,086,300	2,160,700	5,600	4,200	519,900		13,000	500,000	94,041,800
Classified Activities	600	(2,000)			(46,400)														-47,800
Asset Capitalization Program	(59,100)	(314,800)	(3,800)	(75,000)	(34,600)														-487,300
ENTERPRISE Rehab		(840,500)																	-840,500
Modification Installation	(157,500)	(1,184,600)	(4,200)	(200,800)				(67,100)		(25,900)		(56,100)							-1,696,200
Ammunition Plant Maintenance	(71,000)																		-71,000
TOTAL	24,589,900	24,945,900	1,767,500	23,269,300	8,237,900	97,600	902,600	949,900	79,400	1,015,400	1,086,300	2,104,600	5,600	4,200	519,900	NA	13,000	500,000	90,899,000

REVOLVING AND MANAGEMENT FUNDS

The Department of Defense Stock Funds provide for the financial management, inventory control, and distribution of consumable items of supply and low-cost equipment to support both peacetime and wartime operations. Stock fund inventories include consumable spare and repair parts used in maintenance programs to repair equipment, as well as fuel, rations, medical supplies and general and administrative supplies necessary to maintain the readiness and sustainability of the military services' weapon systems and personnel.

The stock funds operate under a revolving fund concept. The corpus of each fund consists of inventory and cash. Sales of stock fund inventory generate cash that is used to replenish inventory levels.

The amended fiscal year 1990 request included $774.4 million for augmentation of existing stock fund inventories and build-up of war reserve stocks. The committee recommends a reduction of $75 million to this request.

The following table summarizes the committee's actions in this area.

REVOLVING AND MANAGEMENT FUNDS

[In millions of dollars]

	Amended fiscal year 1990 request	Committee recommendation	Difference
Army Stock Fund	107.6	97.6	–10.0
Navy Stock Fund	223.4	201.4	–22.0
Air Force Stock Fund	339.3	306.3	–33.0
Defense Stock Fund	104.1	94.1	–10.0
Total	774.4	699.4	–75.0

HUMANITARIAN ASSISTANCE

The committee recommends a provision (sec. 303) authorizing $13.0 million to continue the program to transport humanitarian relief supplies to Afghan refugees. Of this total, $3.0 million is available for Thai-Cambodia operations; up to $3.0 million can be transferred to the Department of State. All funds are available until expended, to the extent provided in an appropriations act.

The committee has been advised by the Department of Defense that the program authorized by this section does not conflict with the Geneva Accords regarding the conflict in Afghanistan signed on April 13, 1988.

The committee concludes that the following activities are within the scope of the authority:

a. The Secretary of Defense may use funds authorized by this section to transport humanitarian cargo donated by foreign governments or organizations for the Afghan people, if the Secretary of State determines that such cargo will contribute to the relief of the Afghan people and requests the Secretary of Defense to transport such cargo. Such transportation may be provided only on a space-available basis.

b. Funds authorized by this section may be used by the Secretary of Defense, if requested by the Secretary of State, to fund commercial transportation of Afghans within the region (from within or without Afghanistan) and to provide transportation on a space-available basis on relief flights from the region to the United States or other Western nations. Such transportation may be provided only to individuals travelling to and from training in medical care and other country-building skills.

c. Funds authorized by this section, whether administered by the Secretary of Defense or the Secretary of State, may be used to repair and rebuild transportation assets, construction equipment and high value DOD non-lethal excess property.

USE OF OPERATION AND MAINTENANCE FUNDS TO PURCHASE INVESTMENT ITEMS

Section 321 of the committee bill repeals section 303 of the National Defense Authorization Act for Fiscal Years 1988 and 1989 which provides that operation and maintenance funds may not be used to purchase items costing more than $5,000 in fiscal year 1990 if purchases of the items prior to fiscal year 1988 were chargeable to procurement appropriations. With the enactment of this provision, the Defense Department will retain the $15,000 threshold on the purchase of expense type items in the operation and maintenance accounts authorized for fiscal year 1988 and fiscal year 1989. Retention of this $15,000 threshold will maintain increased financial flexibility at the local activity level by promoting greater management flexibility and economic efficiency, and by allowing local officials to fund their prioritized requirements within allocated resources.

PROHIBITION OF JOINT USE OF THE MARINE CORPS AIR STATION AT EL TORO, CALIFORNIA

Section 322 would prohibit the Secretary of the Navy from entering into any agreement to permit the regular use of civil aircraft at Marine Corps Air Station, El Toro. This restriction is not meant to preclude the use of the airfield by general aviation aircraft owned or operated by installation personnel or base recreation activities.

BASE CLOSURE

The committee recommends a provision (sec. 331) which would require a report by the Comptroller General addressing the process and conclusions reached by the Defense Secretary's Commission on Base Realignment and Closures. This report would be provided to the Secretary of Defense and the Committees on Armed Services of the Senate and House of Representatives no later than November 15, 1989.

The committee has an ongoing oversight interest in the execution of the Commission's recommendations, and this report by the General Accounting Office will be useful in this effort. This report will also be useful to individual members, to affected communities, and to litigants.

The committee's hearings on the base realignment and closure proposals uncovered questions of possible errors of fact and analysis in the Commission's work. The committee believes it is essential that these errors be identified for the interests of the affected communities and individuals.

ENVIRONMENTAL RESTORATION OF JEFFERSON PROVING GROUND

The committee bill includes a provision (sec. 332) requiring the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and House of Representatives by April 15, 1990, on the environmental contamination at the Jefferson Proving Ground, Indiana, and on the Defense Department's plans for cleanup of this facility.

MILITARY UTILIZATION OF THE INLAND NAVIGATION SYSTEM

Section 341 of the committee bill requires the Secretary of the Army to submit to Congress a report on the potential for obtaining efficiencies, savings, and enhanced mobilization preparedness through increased utilization of the national inland waterway system by the Department of Defense and defense industry. This report will provide a basis for determining potential transportation savings and improving the nation's posture for mobilization preparedness.

The inland waterway is a significant national infrastructure resource. Large ongoing federal and private investments in navigation system modernization are resulting in significant improvements in system capacity, dependability and efficiency. Prototype movements of military equipment during 1988 and 1989 have suggested the practicality and potential efficiencies which could result from increased military utilization of a modern waterway system. Waterway utilization could reduce transportation costs and increase effective training time for Reserve and National Guard forces during peacetime. Given the proven efficiency of the waterway system in the movement of bulk commodities, opportunities for more cost effective movements of bulk type military materials and supplies also warrant evaluation.

REPORT ON ENVIRONMENTAL REQUIREMENTS AND PRIORITIES

Section 342 of the committee bill requires the Secretary of Defense to submit a report on the Defense Department's environmental requirements and priorities to the Senate and House Armed Services Committees by December 31, 1990. This report should include a discussion of major environmental concerns that the Department of Defense will face world-wide in the next decade, and a qualitative and quantitative assessment, where practicable, of each concern; a status report of current DoD programs to address these concerns; the projected funding and schedule of actions under the Department's Installation Restoration Program; and an assessment of anticipated federal, state and local environmental regulatory requirements and the impact of these requirements on DoD operations and activities.

REPORT OF MANPOWER, MOBILITY, SUSTAINABILITY AND EQUIPMENT

Last year the National Defense Authorization Act for Fiscal Year 1989 included a provision (sec. 327) requiring the Secretary of Defense to submit to the Congress a comprehensive report on the readiness of the armed forces, in terms of manpower, mobility, sustainability, and equipment, to perform their assigned missions. This report was to be provided to the Congress by February 15, 1989. As of the time the committee reported this bill to the Senate, the Department had not yet submitted this readiness report to the Congress.

The committee recommends a provision (section 343) requiring a similar comprehensive readiness report from the Secretary of Defense. This report should be submitted to the Congress by February 15, 1990. The committee directs the Department to make every effort to comply with the established reporting date next year.

REPORT ON IMPACT AID FUNDING

The committee bill includes a provision (sec. 344) requiring that not later than December 31, 1989, the Secretary of Defense shall submit a report to the Committees on Armed Services of the Senate and House of Representatives, the Senate Committee on Labor and Human Resources, and the House Committee on Education and Labor on the feasibility and desirability of restoring to the Department of Defense by October 1, 1991, impact aid responsibilities for schools impacted by Department of Defense activities.

ENERGY EFFICIENCY INCENTIVE

The committee recommends a provision (sec. 351) which would amend section 736 of the National Defense Authorization Act for Fiscal Year 1989 regarding energy efficiency incentives. The committee is concerned that the Department of Defense has been slow to realize energy savings under the existing authority of the National Energy Conservation Policy Act. That act provides a mechanism for agencies to enter into energy conservation contracts with little or no capitalization and realize potentially significant savings.

Despite the significant potential for economies through a variety of conservation techniques and the scarcity of operation and maintenance funds which pay for utilities, the Department of Defense has entered into only one contract under this authority. This provision provides further incentives for local installation commanders to pursue these energy conservation initiatives. It provides that half of the savings the Department realizes during the first five years of such contracts shall be available to local commanders to be used for morals, welfare and recreation functions, or for minor construction projects which will enhance that quality of life of personnel on such installations.

PURCHASE OF RIGHT-OF-WAY AND RAIL LINE FOR USE IN CONNECTION WITH THE HAWTHORNE ARMY AMMUNITION PLANT

Section 352 of the committee bill authorizes the Secretary of the Army to use O&M funds to purchase the right-of-way across tribal lands and to purchase and maintain the rail line over the right of way from milepost 331.12 near Wabusku, Nevada to milepost 385.00 near Thorne, Nevada. This rail line is essential to meeting both peacetime and mobilization transportation requirements of the Hawthorne Army Ammunition Plant.

USE OF CHLOROFLUOROCARBONS AND HALONS IN THE DEPARTMENT OF DEFENSE

It is increasingly clear that threats to the global environment, particularly global warming and the destruction of the stratospheric ozone layer, should be seen as national security issues and as threats to international stability. As a result, important changes in industrial practice are being undertaken as part of a concerted effort to reduce and then eliminate the use of chloroflourocarbons (CFCs) and halons: two classes of chemicals which play major roles in global warming and ozone depletion.

The Department of Defense is an important consumer of CFCs and halons, which it uses for refrigerants, fire-fighting and as solvents. Recognizing the global effort now underway to phase out these substances, the Department of Defense has set up a process aimed at the same goal. The committee commends this effort, but is concerned that the armed services move at the fastest pace possible to find and employ alternatives to CFCs and halons. The committee recognizes that the costs for so doing must be met, and that the military's peculiar requirements for CFCs and halons will have to be reflected in plans for a transition.

Meanwhile, pending success in replacing these substances, the Department of Defense could substantially reduce the release of CFCs and halons into the atmosphere, as a consequence of changes which can be made in readiness, testing and exercise procedures. This possibility is already recognized in the Department of Defense Directive 6050.9 of February 13, 1989 on chlorofluorocarbons and halons. Existing guidance does not, however, establish any goals for such reduction either in terms of amounts of the substances in question or the pace of progress. It is the committee's view that such targets should be set and mandated. Subsection (a) of section 353 requires the Defense Department to establish programs for the reduction of unnecessary emissions of CFCs and halons into the atmosphere as a consequence of maintenance procedures, training and testing practices.

The Department of Defense procures a significant number of products that are currently manufactured using CFCs. In light of the impending phase-out of the use of these substances, the Department of Defense has been working with the Environmental Protection Agency and the defense industry to complete feasibility tests of substitutes for CFCs. Once these tests are completed, changes in military specification and manufacturing processes can be made. Since, however, reliability testing has not yet been completed, it is almost impossible for either the Department of Defense or defense contractors to predict with any certainty when the total elimination of ozone-depleting chemicals will be possible.

This problem is particularly acute because the Department of Defense must deal with a long list of applications for which substitutes will be necessary and because many of the products are manufactured under long-term contracts of 10 or 15 years in length. In order to address this problem, it is the committee's view that an accounting of how many different military specifications currently require the use of ozone-depleting compounds must be made as soon as possible. Once such a list is completed, the Department of Defense, with the assistance of a CFC Advisory Committee established under subsection (c) of this section, should formulate a research program to identify substitutes, taking into account the safety, reliability, performance capability, cost, and expeditious availability of compounds and technologies considered for CFC uses.

BIODEGRADABLE BAG PURCHASE REQUIREMENT

The Department of Defense is a major user of plastic bags. The increased use of biodegradable plastic products has been shown to be beneficial to the environment. By August 1989, some categories of plastic bags will be available in a biodegradable configuration for purchase through the General Services Administration.

As biodegradable bags become available in each category, the committee directs the Department will ensure that at least 10 percent of each requiring activity's purchases are in the biodegradable configuration.

Within six months of initial procurement, the Department shall report to the Committees on Armed Services of the Senate and House of Representatives any identifiable problems (i.e., side effects/impacts of DoD operations, shelf life, and cost) associated with their use. Absent the identification of problems, the Department is directed to increase the acquisition of biodegradable plastic bags in each category where available by five percent each succeeding fiscal year so as to reach 30 percent.

WASTE RECYCLING PROGRAM

The Secretary of Defense shall conduct a study in order to identify the feasibility of establishing waste recycling programs on military installations for waste generated by those installations. The study will determine the quantity of waste generated annually and which portion is recyclable by category.

The Secretary of Defense shall submit by September 1, 1990 to the Committees on Armed Services of the Senate and House of Representatives a report on the results of this study and the feasibility, desirability, and potential time frame for implementing waste recycling programs on military installations. The report should include any lessons learned from previous Department of Defense studies and tests of waste recycling.

COMMISSARY AND EXCHANGE BIODEGRADABLE USAGE PLAN

The Department of Defense is directed to submit by March 15, 1990 to the Committees on Armed Services of the Senate and House of Representatives a plan to implement acquisition of biodegradable plastic carry bags by the Department for use in commissary and exchange systems.

The Department's plan will insure that not less than 10 percent of the carry bags procured for exchange and commissary stores will be biodegradable.

The plan will provide that acquisition can begin in fiscal year 1991.

AUTHORIZATION OF LONG-TERM AIRCRAFT SUPPORT CONTRACT

The Army requested approval to enter into a long-term aircraft support contract at the United States Army Kwajalein Atoll (USAKA). The Army withdrew a fiscal year 1988 reprogramming action since the subcontract lease expired prior to approval by the House Armed Services Committee and Senate Appropriations Committee. The requirement for additional intra-atoll passenger and cargo air transportation still exists, and a permanent solution is for the U.S. Army Strategic Defense Command to enter into a long-term aircraft support contract. The USAKA logistics engineering support contractor is currently required by contract to provide aviation support at USAKA using Department of the Army-owned aircraft. The Army plans to implement the contract under the current and follow-on USAKA engineering and support contracts. The contract can be implemented with existing resources at no additional cost to the government and will allow the Army to redistribute four SHORTS aircraft in the inventory to other validated Army requirements. Authority to enter into such a contract is provided in section 354.

AUTHORITY TO LEASE FLEET ELECTRONIC SUPPORT AIRCRAFT

The Congress authorized the Navy to lease aircraft for use by the Fleet Electronic Warfare Support Group in the National Defense Authorization Act for Fiscal Year 1989 if the cost of the lease was less than the cost of operating and maintaining the same number of existing aircraft. The authorization required that the Navy demonstrate savings on an aircraft per aircraft basis, which was not possible. Since two replacement aircraft will be capable of satisfying mission requirements for which four existing aircraft are currently required, section 355 permits the lease if it results in cost reductions in meeting current mission requirements on a fleet basis, not an aircraft basis.

REPORT ON MANPOWER, SUSTAINABILITY AND READINESS OF PUBLIC AND PRIVATE SHIPYARDS

The committee is concerned about the readiness of the public and private shipyards to provide for the overhaul and repair of naval vessels in the event of military conflict. Accordingly, the committee requests the Secretary of Defense to submit a report on the manpower, sustainability and readiness of public and private shipyards to the Committees on Armed Services of the Senate and House of Representatives not later than February 15, 1990.

This report must identify the public and commercial industrial facilities, capabilities, occupational skills, and personnel strength necessary to support the overhaul, modernization and repair of naval vessels in conjunction with the Navy's overall mobilization base.

TITLE IV—PERSONNEL AUTHORIZATIONS AND RELATED ITEMS

The Subcommittee on Manpower and Personnel held several hearings this year to receive testimony from Department of Defense, Congressional Budget Office, and General Accounting Office witnesses on the manpower and personnel portion of the amended defense budget request for fiscal years 1990 and 1991. In addition, the subcommittee met in joint session with the Subcommittee on Readiness, Sustainability, and Support and the Subcommittee on Conventional Forces and Alliance Defense to receive testimony from Department of Defense and Congressional Budget Office witnesses on the issue of reserve forces substitution, with particular focus on the capability of the Air National Guard and Air Force Reserve to accept additional flying missions from the active Air Force. Based on these hearings, and on reports and justification material submitted to the committee, the committee took action to authorize strength levels and training loads, enhance personnel compensation and benefit initiatives, and recommend personnel management guidelines.

To the extent justified, the committee recommended authorizations for both fiscal years 1990 and 1991.

ACTIVE DUTY END STRENGTHS

The Department of Defense requested an active duty end strength of 2,121,500 for fiscal year 1990 (15,600 below the level authorized for fiscal year 1989), and an active duty end strength of 2,120,100 for fiscal year 1991 (1,400 below the level requested for fiscal year 1990).

The committee's recommendation would reduce the active duty end strength requested for fiscal years 1990 and 1991 by 1,305. The reduction disallows the planned reallocation of excess military manpower spaces identified by the Department of Defense in unified and specified command and supporting headquarters into other "unfunded requirements" in the military services.

The committee believes the reduction is appropriate because the Department of Defense has been unable to provide adequate supporting justification for the retention of these excess spaces and their application to "unfunded requirements" in the military services.

The committee's recommendation (sec. 401) for each military service is shown below:

ACTIVE DUTY END STRENGTHS ADMINISTRATION REQUEST

	Fiscal year 1990	Fiscal year 1991
Army	764,400	764,100
Navy	592,000	592,000
Marine Corps	197,200	197,200
Air Force	567,900	566,800
Total	2,121,500	2,120,100

COMMITTEE RECOMMENDATION

	Fiscal year 1990	Request difference	Fiscal year 1991	Request difference
Army	764,021	−379	763,721	−379
Navy	591,541	−459	591,541	−459
Marine Corps	197,159	−41	197,159	−41
Air Force	567,474	−426	566,374	−426
Total	2,120,195	−1,305	2,118,795	−1,305

ARMY COMBAT FORCE STRUCTURE

The amended budget request for fiscal years 1990 and 1991 included a proposal to inactivate one active brigade of the 4th Infantry Division (Mechanized) at Fort Carson, Colorado. The committee is concerned that this proposal will reduce the current active duty combat force structure of the Army designated for the reinforcement of NATO at a time when conventional arms negotiations could reduce the current level of U.S. forces permanently stationed in NATO.

The committee recommends a provision (sec. 402) prohibiting the Secretary of Defense from taking any action to reduce the number of active Army ground combat brigades assigned to the 4th Infantry Division before December 1, 1990, the date for completion of a comprehensive report to the Congress on the Total Force Policy by the Department of Defense.

The committee believes that the active duty military end strength savings from the proposed inactivation of this brigade can be achieved instead through the savings and economies to be achieved through the recently announced Defense Management Review. Subsection (b) of the provision gives the Secretary of Defense authority to increase the fiscal year 1990 end strenght of the Army authorized under title IV of the committee bill. If such an increase in the Army's end strength is necessary, the Secretary of Defense shall make a corresponding decrease in the end strengths of the other active Services.

The committee also urges the Army to consider activating the final battalion of the 6th Infantry Division (Light) during fiscal year 1990.

OFFICER STRENGTH LEVELS

The National Defense Authorization Act for Fiscal year 1989 established officer strength ceilings as a subset of total active duty end strength authorizations for each of the military services. The officer strength ceilings were mandated to control the disproportionate growth in officer strength since 1980, and to require the Department of Defense to eliminate the surpluses in officer strength it identified in each of the military services.

The Department of Defense has requested officer end strength levels for fiscal year 1990 and 1991 as shown below:

OFFICER END STRENGTH REQUEST

	Fiscal year 1990	Fiscal year 1991
Army	106,077	105,751
Navy	72,610	72,430
Marine Corps	20,110	20,108
Air Force	102,242	102,111
Totals	301,039	300,400

The committee's recommendation (section 401) for each military service is shown below. The reduction of 285 officer positions from the requested level for each fiscal year reflects the officer portion of the positions validated by the Department of Defense as excess to the unified and specified commands and supporting headquarters. These position were retained and realigned to "unfunded requirements" in the military services. The committee is not convinced of the validity of these so-called "unfunded requirements."

COMMITTEE RECOMMENDATION

	Fiscal year 1990	Fiscal year 1991
Army	106,001	105,675
Navy	72,443	72,263
Marine Corps	20,110	20,108
Air Force	102,200	102,069
Total	300,754	300,115

The committee notes that there are management initiatives underway in the Department of Defense that may yield further officer reductions in management headquarters. The committee intends to review the results of the initiatives next year and may revise the fiscal year 1991 officer end strength ceilings if appropriate.

REDUCTION IN THE NUMBER OF AIR FORCE COLONELS

The National Defense Authorization Act for Fiscal Year 1989 required the Air Force to reduce by 250 the number of colonels authorized to be on active duty under section 523 of title 10, United States Code, during fiscal year 1990.

The Department of Defense requested a colonel grade strength level for the Air Force that would essentially restore the reduction in fiscal year 1991. The committee received no compelling justification for such restoration and recommends (sec. 403) a provision that would require the Air Force to continue on active duty 250 less colonels than authorized under section 523 of title 10, United States Code, in fiscal year 1991.

SELECTED RESERVE END STRENGTHS

The Department of Defense requested a Selected Reserve end strength of 1,191,150 for fiscal year 1990 (5,250 above the level authorized for fiscal year 1989), and a Selected Reserve end strength of 1,195,700 for fiscal year 1991 (4,550 above the level requested for fiscal year 1990).

The committee recommends approval of the request as submitted. The committee's recommendation (sec. 421) for each of the reserve components, which is identical to the request, is shown below:

SELECTED RESERVE END STRENGTHS

Component	Fiscal year 1990	Fiscal year 1991
Army National Guard	458,000	458,500
Army Reserve	321,700	323,100
Naval Reserve	153,400	155,000
Marine Corps Reserve	44,000	44,100
Air National Guard	116,200	116,300
Air Force Reserve	84,900	85,200
Coast Guard Reserve	12,950	13,500
Total	1,191,150	1,195,700

RESERVE FULL-TIME SUPPORT END STRENGTHS

The committee recommends approval of the full-time support end strengths requested by the Department of Defense for fiscal years 1990 and 1990.

The committee notes, as it did in its action on the National Defense Authorization Act for Fiscal Years 1988 and 1989, that although the Department of Defense has made some progress in justifying and prioritizing its full-time support requirements, continued emphasis is required. For example, testimony received from Department of Defense witnesses on reserve component full-time support programs indicates considerable confusion over whether or not the transfer of four HAWK missile battalions from the active force structure of the Army to the Army National Guard is adequately resourced in the full-time support end strength requested for the Army National Guard.

In view of the foregoing, and since there are lower priority positions in the Army National Guard and the other reserve components, the committee directs the Secretary of Defense to evaluate and prioritize the full-time support requirements of each of the reserve components and to report to the committee by January 1, 1990, the results of his review. The report shall specifically address the adequacy of full-time support for the HAWK missile battalions transferred to the Army National Guard. The committee further directs that the report include a legislative proposal, if appropriate, to realign or otherwise provide for the proper resourcing of full-time support requirements among the reserve components.

The committee's recommendation (sec. 422) for each of the reserve components, which is identical to the request, is shown below:

RESERVE FULL-TIME SUPPORT END STRENGTHS

Components	Fiscal year 1990	Fiscal year 1991
Army National Guard	26,164	26,514
Army Reserve	13,680	14,027
Naval Reserve	22,708	23,565
Marine Corps Reserve	2,301	2,401
Air National Guard	8,517	8,468
Air Force Reserve	686	700
Totals	74,056	75,675

ACTIVE DUTY RESERVE SUPPORT GRADE CEILINGS

The committee recommends approval of the active duty reserve support grade ceilings requested by the Department of Defense for fiscal years 1990 and 1991.

The committee's recommendation (sec. 423) for each military service is shown below:

ACTIVE DUTY RESERVE SUPPORT GRADE CEILINGS

	Army	Navy	Air Force	Marine Corps
FISCAL YEAR 1990				
E-9	542	200	224	13
E-8	2,504	425	637	74
O-4	3,030	1,065	575	110
O-5	1,448	520	476	75
O-6	351	188	190	25
FISCAL YEAR 1991				
E-9	557	202	231	13
E-8	2,585	429	670	74
O-4	3,219	1,071	575	110
O-5	1,524	520	532	75
O-6	364	188	194	25

The committee notes that the approved ceilings reflect substantial increases in all of the military services except the Marine Corps. These increases have been justified primarily on the basis of the need for headroom to promote full-time personnel. Although there is some merit to this rationale, the committee is concerned that the grade ceilings have expanded almost on a free-flow basis. Therefore, the committee directs the Secretary of Defense to develop a program for the management of these grades on a systematic, permanent basis and to report to the committee on these recommendations, to include proposed legislation if appropriate, not later than January 15, 1990.

REDISTRIBUTION OF FLAG OFFICERS AUTHORIZED TO THE MEDICAL CORPS OF THE NAVAL RESERVE

The Department of Defense requested authority to reallocate one each of the seven flag officer authorizations provided for the Medical Corps of the Naval Reserve under section 5457(a) of title 10, United States Code, to the Nurse Corps and the Medical Service Corps of the Naval Reserve. The committee recommends (sec. 424) approval of the request and notes that the reallocation will not result in a net increase in flag officers authorized to the Naval Reserve.

MILITARY TRAINING STUDENT LOADS

The committee recommends approval of the military training student loads requested by the Department of Defense for fiscal years 1990 and 1991.

The committee continues to urge the Secretary of Defense to emphasize individual skill qualification of reserve component personnel, especially in the Army Reserve. Although there has been some improvement in the readiness status of Army Reserve units, individual skill qualification deficiencies continue to hamper unit readiness. The committee intends to continue to review this issue next year.

The committee's recommendation (sec. 431) for each military service and reserve component is shown below:

AUTHORIZATION OF MILITARY TRAINING STUDENT LOADS

	Fiscal year—	
	1990	1991
Service/component:		
Army	79,667	74,760
Navy	67,224	66,517
Marine Corps	21,656	22,235
Air Force	39,575	37,757
Army National Guard	19,168	18,667
Army Reserve	15,377	15,963
Naval Reserve	3,237	3,259
Marine Corps Reserve	4,179	4,178
Air National Guard	2,941	2,939
Air Force Reserve	1,752	1,774
Total	254,776	248,049

CIVILIAN STRENGTH MANAGEMENT

The committee recommends (sec. 441) approval of the request by the Department of Defense to repeal the requirements of section 115(b)(2) of title 10, United States Code, and section 129 of title 10, United States Code, relating to the authorization and control of civilian personnel strength in the Department of Defense.

The committee urges the Department of Defense to continue to aggressively seek efficiencies in its management of civilian personnel resources and to continue to report in defense authorization hearings on the results of its efforts.

VOLUNTEER SERVICES

The committee recommends (sec. 442) a provision that would expand the existing authority to use volunteer services for museums and family services to include natural resources programs. This additional authority will permit the Department of Defense to initiate a program in which citizens can volunteer to help maintain and improve the natural resources of the 25 million acres of public lands assigned to the Department of Defense.

TITLE V—MILITARY PERSONNEL

LONGEVITY CREDIT FOR CERTAIN RESERVISTS IN THE DELAYED ENTRY PROGRAM

The Department of Defense requested authority to exclude certain reservists in the delayed entry recruiting program, who are not required to participate in reserve drills before entering into basic military training, from being credited with longevity for the period of time spent in the delayed entry recruiting program for pay purposes. The requested authority would also provide a basis in law for the delayed entry program for the active force. The committee recommends (sec. 501) approval of the request.

ACTIVE GUARD AND RESERVE EDUCATION BENEFITS

The Department of Defense requested authority to limit the G.I. Bill educational benefits available to active guard and reserve personnel to the G.I. Bill educational benefits available to active force personnel. The committee recommends (sec. 502) approval of the request.

INDIVIDUAL READY RESERVE (IRR) MUSTER PAY

The Department of Defense requested authority to simplify compensation for individual ready reservists who are mustered under its one-day call-up program to ensure IRR availability. The Department proposed establishing a flat rate of $80.00, indexed to the average per diem rate in the United States, for each individual mustered under this program regardless of grade. The committee recommends (sec. 503) approval of the request.

REPEAL OF CLOTHING ALLOWANCE FOR CERTAIN RESERVE OFFICERS

The Department of Defense requested authority to repeal an obsolete clothing allowance entitlement provided for under section 415, title 37, United States Code, for certain reserve officers at the rate of not more than $50.00 every four years. The committee recommends (sec. 504) approval of the request.

NAVAL RESERVE FLEET DUTY INCENTIVE PAY TEST

The Department of Defense requested authority for a two-year test program to pay a special unit assignment pay to enlisted members who are assigned to high priority units when they perform inactive duty for training. The pay may not exceed $10.00 for each period of training. This pay would be in addition to other pay or allowances to which a member would be entitled and is proposed as a test to determine if such payment would encourage higher participation of reservists in high priority units. The committee recommends (sec. 506) approval of the request.

ADEQUATE MANNING OF MARINE CORPS RESERVE SUPPORT ACTIVITIES

The committee directs the Secretary of the Navy and the Commandant of the Marine Corps to take appropriate action to ensure 100 percent manning of authorized positions at the Marine Corps Reserve Support Center, Marine Corps Finance Center, and Marine Corps Central Design and Programming Activity. The committee expects this 100 percent manning to be accomplished within 90 days. In addition, the committee directs the Commandant of the Marine Corps to conduct a manpower requirements audit of these activities to determine if they are adequately resourced and to report to the committee by December 1, 1989 on the results of the audit. The committee intends to review this audit carefully.

The committee takes this action because it has been made aware of inadequate administrative support of Marine Corps Reserve personnel requirements, such as the timely issuance of orders and the timely issuance of pay and travel reimbursements. The committee expects that personnel will be shifted within the 100 percent manning direction to the orders processing and pay and travel reimbursement sections to insure these functions have a high priority. This problem is not unique to the Marine Corps. The committee is aware of similar difficulties in the reserve components of the other military services. The committee urges the Assistant Secretary of Defense for Reserve Affairs to examine this problem and to take corrective action. The committee expects this matter to be specifically addressed in defense authorization testimony next year.

USER FEES

The Office of Management and Budget included a provision in the amended defense budget request for fiscal years 1990 and 1991 initiating a two-year pilot program introducing co-payments in the provision of health care to non-active duty beneficiaries.

The committee opposes this initiative as it has in the past. Unless and until benefits received as part of a co-payment plan are better defined, the committee opposes this program and views it as a burden on military families. The committee recommends (sec. 521) a provision prohibiting this demonstration project during fiscal years 1990 and 1991.

LIMITATION ON CHAMPUS PAYMENTS

For a number of years, the annual Defense Appropriations Act has included a provision which has limited CHAMPUS payments to the 80th percentile of billed charges made for similar services in the same locality. The committee recommends (sec. 522) authorization of this limitation of CHAMPUS payments to the 80th percentile of billed charges.

In addition, during the last fiscal year, the Department of Defense, in accordance with a provision included in the Department of Defense Appropriations Act for Fiscal Year 1989, limited the amount by which the allowable charge for CHAMPUS providers may be updated to the amount justified by the economic index data similar to that used under the Medicare program. The General Accounting Office has recommended implementation of this alternative. Therefore, the committee also includes a provision which authorizes limitation of allowable charges for CHAMPUS providers to the amounts justified by the Medicare Economic Index (MEI). However, recognizing the differences in the two programs, the Secretary of Defense would be authorized to prescribe regulations permitting exceptions under special circumstances.

REIMBURSEMENT RATES UNDER THE SUPPLEMENTAL CARE PROGRAM

The committee recommends (sec. 523) a provision which requires that reimbursement methodology for the supplemental care program for active duty members be identical to the reimbursement methodology used under CHAMPUS. This linkage is currently in effect for fiscal year 1989 due to legislation in the Department of Defense Appropriations Act for Fiscal Year 1989.

ARMED FORCES HEALTH PROFESSIONS SCHOLARSHIP PROGRAM

The committee recommends (sec. 524) a provision expanding the Armed Forces Health Professions Scholarship Program to provide a grant to medical residents studying in critically needed skills in return for military service. The program will provide annual grants and stipends for graduate physicians in critically needed specialties designated by the Defense Department.

EDUCATIONAL LOAN REPAYMENT

The committee recommends (sec. 525) a provision to enhance the effectiveness and utilization of the loan repayment program by providing authorization for repayment of non-federal loans used to finance the education of health professionals, increasing repayment amounts, and permitting loan repayment for health professionals in the Individual Ready Reserve.

DEADLINE FOR IMPLEMENTATION OF OUTPATIENT DIAGNOSTIC RELATED GROUPS (DRG)

The National Defense Authorization Act for Fiscal Years 1988 and 1989 contained a provision extending the implementation date for use of diagnostic related groups (DRGs) as the primary budgetary tool for allocation of resources to military treatment facilities for outpatient care. Due to continued difficulties experienced by the Secretary of Defense in implementing an ambulatory patient DRG system, the committee recommends (sec. 526) a provision further delaying the date for implementation of outpatient DRGs from October 1, 1989 to October 1, 1990.

WAIVER OF CURRENT RETIREMENT AGE OF CERTAIN MEDICAL PROFESSIONALS

The committee recommends (sec. 527) a provision which increases the current mandatory retirement age from age 67 to age 68 for medical, dental, or nursing personnel actively engaged in delivering patient care. This change is consistent with the requirement that the age standard for affiliation can be established no earlier than age 47, thus allowing retirement eligibility for those affiliating at age 47.

APPOINTMENT AND RETENTION OF OLDER HEALTH PROFESSIONALS

The National Defense Authorization Act for Fiscal Years 1988 and 1989 contained provisions to allow the Department of Defense to retain and recruit older health professionals in the reserve components. The Act also contained a provision to allow deferment of mandatory retirement for age of regular officers performing certain medical duties.

The committee is encouraged to note that the Department of Defense is making use of these authorities. According to Department of Defense testimony, 760 physicians and nurses have been appointed under these authorities and 50 physicians and nurses have voluntarily extended beyond mandatory retirement at age 60 in the reserve components and at age 62 in the regular component. The committee continues to urge the Department of Defense to aggressively use these authorities to tap the pool of talent among older health professionals to help meet the manpower needs in military medical care.

The committee believes that the administrative process for appointing older health professionals should be carefully reviewed to ensure the process is efficient. Also, the committee is interested in the possibility of a program to facilitate the recruitment of older health professionals through the payment of medical malpractice insurance premiums incurred by these health professionals for future liability. The committee directs the Secretary of Defense to study and report to the committee its recommendations in this regard by December 1, 1989.

CHAMPUS REFORM INITIATIVE

The committee has long supported exploring alternative health care delivery programs to help contain spiralling CHAMPUS costs. The CHAMPUS Reform Initiative (CRI), which became operational August 1, 1988, has been a welcome alternative for beneficiaries in California and Hawaii. Improved access to health care and information on when and where care can be obtained have been major accomplishments of the program.

Unfortunately, the committee is aware of serious problems in the claims processing system. While claims processing seems to be improving, the committee remains concerned about the situation. The committee emphasizes that the health care needs of the beneficiaries in the CRI region must be thoroughly considered prior to implementation of any alternative arrangements for health care delivery.

VA-DOD SHARING

The committee recognizes potential cost efficiencies and supports sharing between the Veteran's Administration and the Department of Defense medical care systems. This support was exhibited in the National Defense Authorization Act for Fiscal Year 1989 which designated $20 million to facilitate such sharing agreements.

The committee continues to be concerned about the oversight and centralized guidance relating to such agreements. A congressionally mandated report required by the National Defense Authorization Act for Fiscal Year 1989, due February 15, 1989, still has yet to be received. The committee questions the readiness of the Department to move forward with more large scale resource sharing without overall guidance and management of the program. The committee is concerned over suggestions that CHAMPUS funds be used for such agreements. When a centralized program is in place, and agreements are budgeted through the budget process, the committee would support agreements that realize cost efficiencies.

PROBATIONARY PERIOD FOR OFFICERS PROMOTED TO THE O–4, O–5, O–6 AND O–8 GRADES

The committee recommends approval of a provision (sec. 531) that would establish an 18-month probationary period following an officer's promotion to the O–4, O–5, O–6, and O–8 grades during which the President may vacate the promotion. This authority would expand current authority under section 625, title 10, United States Code, which authorizes the President to vacate promotions to the O–7 grade within 18 months of an officer's promotion to that grade. The committee expects this expanded authority to be used in those instances in which an officer is promoted to one of these grades and fails to perform satisfactorily.

FROCKING OF GENERAL AND FLAG OFFICERS

The committee directs the Secretary of Defense to take appropriate action to limit the practice of frocking (the promotion of an individual in advance of an actual grade vacancy) to only those rare instances where such frocking is deemed necessary for command and seniority reasons in joint or international positions and operational command positions within a military service. The committee further directs that the authority to approve future frocking in the general and flag officer grades be limited to the Secretaries of the military services.

The committee notes that there are about 66 officers frocked to the one-star grade and 26 officers frocked to the two-star grade. The committee views this as excessive. This means that there are 66 (6 percent) general and flag officers above the active duty limit set by Congress of 1,073, and 26 (7 percent) more officers in the two-star grade than the 377 allowed by statute. Many of these frocked officers, especially in the Army, fill positions for which there are no apparent, compelling reasons for such frocking.

Such positions include: Deputy Chief of Staff, Doctrine, TRADOC; Deputy Chief of Staff, Intelligence, USAREUR & 7th Army; Program Executive Officer, Command and Control Systems, U.S. Army Communications and Electronics Command; Deputy Chief of Staff, Development, Engineering & Acquisition, Army Materiel Command; Deputy Commandant, Command and General Staff College to name a few two-star positions, and Director, Operations and Maintenance, Army Appropriations; Program Executive Officer, Communications Systems, U.S. Army Communications and Electronics Command; Deputy Chief, Army Reserve; Deputy Chief, Legislative Liaison; and Assistant Deputy Chief of Staff, Combat Development, TRADOC to name a few one-star positions. Incumbents to these positions all work for another general officer in their respective organizations and some are twice or even three times removed in the chain of command from the commanding general.

The committee views frocking as a means of circumventing grade limits and urges the Secretary of Defense to issue strict guidance to curb the practice, not only in the general and flag officer grades, but in all others as well. The committee believes that additional problems are created by poor management of general and flag officers that result in last minute assignments and rapid turnover. The committee expects general and flag officers to be managed on a regular and systematic basis and looks to the Secretary of Defense to promulgate the necessary policies.

The committee also notes that it received a nomination list from the Army for promotion of officers to the colonel grade on June 7, 1989, and that the first officer that would be promoted from that list is not expected to be promoted until November 1990. It is actions such as this that fuel pressure to frock. The committee urges the Secretary of Defense to regulate the timing of promotion boards to more closely conform to expected vacancies so that selected officers do not spend an excessive amount of time on promotion lists before they are actually promoted.

WARRANT OFFICER MANAGEMENT SYSTEM

The Department of Defense requested authority to establish a W-5 warrant officer grade and to provide a uniform system for the management of the warrant officer communities in the Department of Defense.

The committee did not receive the request until June 15, 1989. The committee notes that the request is a substantive proposal which merits thorough review. Therefore, the committee deferred action on the request. The committee expects the Subcommittee on Manpower and Personnel to evaluate and make recommendations on the request for possible inclusion of appropriate provisions in the defense authorization bill next year.

The committee directs the Secretary of Defense to submit a report to the committee recommending: (1) consistent tenure provisions for warrant officers in all of the military services; and (2) a uniform system for warrant officer grade management and control. The committee also requests that the report contain analyses of jobs that can be effectively filled by warrant officers in each of the military services. The report is to be submitted to the committee by November 15, 1989.

STUDY ON TOTAL FORCE POLICY

The committee recommends (sec. 541) a provision requiring the Secretary of Defense to submit to the Senate and House Armed Services Committees a report by December 1, 1990, on the operation of the Total Force Policy in the Department of Defense. The committee notes that there has been no comprehensive, authoritative study on the Total Force Policy since its inception over 15 years ago. The committee also notes that Department of Defense witnesses have had difficulty articulating the policy in other than very vague, general terms. The result is an impression of a leadership vacuum in this area. The committee urges the Secretary of

Defense to assemble a study group capable of conducting an objective, thorough study.

There is no doubt in the committee that our National Guard and Reserve forces are vital to our national security. We have traditionally relied on these forces during periods of national emergency or war to augment relatively small standing active forces. During peacetime, National Guard and Reserve forces trained to the extent resources allowed them to do so to be prepared for call-up. That is history.

Since the promulgation of the Total Force Policy in the Department of Defense over 15 years ago, our National Guard and Reserve forces have been designated as full partners with the active components in deterring aggression during peacetime and in waging war if peace should fail. Under this policy, substantial missions were assigned to the National Guard and Reserve components. Therefore, our National Guard and Reserve components are no longer only forces held in reserve for a future use nor are they just a cadre force. Instead, National Guard and Reserve units are an integral part of theater operational plans, and successful combat operations cannot be carried out without them.

For example, the Army Reserve is relied on to provide 70 percent of the Army's combat support and combat service support forces. Combat support missions include engineer, signal, intelligence, and chemical activities. Combat service support missions include medical, maintenance, supply, transportation, and ammunition activities. Obviously, an Army cannot fight for very long without this support, and if 70 percent of this support comes from Army Reserve forces, it is crystal clear that the Army has a big stake in the readiness of these forces.

In a conventional war in Europe, active Army forces depend heavily upon rapid reinforcement from Army National Guard and Army Reserve units within the first 10 to 30 days after the conflict begins. Without these reinforcing units, the active forces cannot sustain themselves and would become ineffective.

This situation is demonstrated in war game scenarios which indicate that shortfalls in the Reserve reinforcing forces quickly become "war stoppers". Specifically, medical shortfalls in early deploying reserve units fall in this category. According to the Department of Defense, these units are *short* of their wartime requirements for physicians and nurses by 7,000 (71 percent) and 31,000 (66 percent) respectively. This is not solely an Army Reserve problem, but a serious total Army problem because it seriously affects Army combat readiness. It is a priority problem that the Army leadership must give priority attention to solving.

The committee makes these points because it believes that the Department of Defense must critically and systematically review warfighting capability in a Total Force context, a context which must recognize the interactive dependencies among active and reserve forces and the timetable for their deployment in event of war.

The committee looks forward to receiving the mandated report so that it can use it as a basis for a plan of action to correct, on a systematic basis, persistent problems that have plagued the effective operation of the Total Force Policy in the Department of Defense.

ACTIVE DUTY SERVICE OBLIGATIONS

The committee recommends (sec. 551) a provision extending the active duty service obligations of graduates of the military service academies and the University of Health Sciences of the Uniformed Services from five to eight years and seven to ten years, respectively. These new active duty service obligations would apply to all new entrants to the military service academies and to the University of Health Sciences of the Uniformed Services beginning in 1991. The committee believes these increases are appropriate to recover the substantial investment made in the education of these personnel and to encourage longer military careers for scarce medical personnel.

The committee believes that the active duty service obligations established for various other education and training programs in the Department of Defense require review and standardization. Therefore, the committee directs the Secretary of Defense to conduct such a review and to report to the committee the results of the review with appropriate recommendations by February 15, 1990.

MILITARY APPELLATE PROCEDURES

The Court of Military Appeals is the highest authority within the military justice system. The Court, an independent tribunal established under Article I of the Constitution, consists of three members, appointed from civil liife for fifteen year terms by the President with the advice and consent of the Senate. The Court regularly interprets federal statutes, executive orders, and departmental regulations. The Court also determines the applicability of constitutional provisions to members of the armed forces. Through its decisions, the Court has a significant impact on the state of discipline in the armed forces, military readiness, and the rights of servicemembers. The Court plays an indispensible role in promoting public confidence in the military justice system.

As the highest court within the military justice system, the Court of Military Appeals performs the same function as the highest appellate court within the jurisdiction of a state or the District of Columbia. As with other courts that serve as the highest appellate tribunal within a jurisdiction, the decisions of the Court of Military Appeals are subject to direct review only by the Supreme Court.

One of the primary functions of the highest appellate tribunal within a jurisdiction is to ensure clarity of decisions and predictability of doctrine. Persons affected by the law must have a reliable basis for planning their conduct, and lower courts must be able to apply the law of the jurisdiction without an undue number of reversals, remands, and other proceedings that delay finality in the judicial process. To a certain extent, change in doctrine is inherent in any judicial system as new issues arise and the fabric of the law changes with the times. Stability in membership of the highest court of a jurisdiction is particularly important to ensure that the normal evolution of the law is not rendered unpredictable as a result of personnel changes.

The goals of clarity and predictability are of particular importance in the military justice system. Commanders and the judge advocates that advise them make numerous decisions affecting discipline and readiness based upon the decisions of the Court of Military Appeals. The rights of servicemembers, the strategy of counsel, and the decisions of military judges are affected significantly by the decisions of the Court of Military Appeals.

In recent years, the ability of the Court of Military Appeals to provide for consistency in doctrine has been compromised substantially by considerable turnover on the Court. In one fifteen year period, nine different judges held the Court's three seats, sitting at various times in 12 different panels. A degree of turnover in inevitable on any court due to age, disability, and other factors. The loss of a single judge has a devastating impact, however, on the stability of a Court composed of only three judges.

The American Bar Association's Standards for Court Organization call for a minimum of five judges on the highest court of a jurisdiction. This standard is met by most states and the District of Columbia.

The committee has included a provision (sec. 552) to revise and modernize military appellate procedures. Subsection (a) provides for the Court to consist of five members, and includes appropriate transitional provisions to ensure even distribution of the terms of the judges. As under current law, the Court will sit as a whole for all its actions, rather than in panels, to ensure clarity and uniformity in the application of military law. Subsection (b) modernizes the removal statute to include standards that Congress has used with respect to other Article I judges. Subsection (c) revises the provision in current law which permits Article III judges to sit on the Court of Military Appeals when a judge on the Court is disabled. Under current law, this opportunity is limited to judges of the District of Columbia Circuit. This does not provide a sufficiently large pool for service in the event of a disability. The provision permits any federal district or appellate court judge to sit on the Court of Military Appeals during the period of disability (or lesser period) upon designation by the President, concurrence of the Chief Justice of the United States and the Chief Judge of the court concerned, and with the consent of the judge to be designated.

Subsection (d) clarifies the status of senior judges on the Court to facilitate the capability of such judges to promptly serve in the event of a disability or vacancy on the Court. Subsection (e) provides the Court with flexibility similar to that exercised by other courts with respect to the clerks of judges and other members of the legal staff. This provision expressly provides, however, that it is prospective only and does not change the civil service status of any of the present employees of the Court. Subsection (f) contains technical amendments to the provisions governing retirement of the judges of the Court of Military Appeals.

Subsection (g) concerns the jurisdiction of the Courts of Military Review, the intermediate appellate courts, which are located in each of the military departments and the Coast Guard. Under current law, these courts, and the Court of Military Appeals, do not have appellate authority over most courts-martial under the Uniform Code of Military Justice. The Courts of Military Review hear all cases (unless appeal is waived) in which the sentence extends to death, a punitive discharge, or confinement for one year or more, but their statutory jurisdiction does not extend to cases involving lesser sentences—no matter how important the legal issues in the case. This anomaly has led the appellate courts to review cases with lesser sentences under the All Writs Act, which under applicable law should be used only in extraordinary cases. The committee believes that the purposes of the Uniform Code of Military Justice would be better served if such review were conducted under a jurisdictional statute as opposed to the ad hoc procedures of the All Writs Act. Accordingly, subsection (g) establishes a procedure for the Judge Advocates General to certify cases to the Courts of Military Review when the sentence is not subject to automatic review.

Subsection (h) requires the President to prescribe standards and procedures for the investigation and disposition of allgations that may affect the fitness of a military trial judge on a Court of Military Review to perform the duties of a judges' office. The Court of Military Appeals recently acted to enjoin an investigation in the absence of such procedures, *United States Navy-Marine Corps Court of Military Review* v. *Carlucci*, 26 M.J. 328 (C.M.A. 1988), which has resulted in substantial uncertainty as to the authority for investigation and disposition of charges related to the fitness of a military judge. The committee believes that in this area, as in other aspects of military law, the appropriate rules should be fashioned by the President in the Manual for Courts-Martial. It is the intent of the committee that to the extent consistent with the Uniform Code of Military Justice, such rules should emulate the standards and procedures that govern investigation (by both executive and judicial authorities) and disposition of allegations concerning judges in the civilian sector.

DRUG AND ALCOHOL TESTING

The committee recommends (sec. 554) a provision which allows the Secretary of a military department to require drug and alcohol testing and evaluation of an applicant before the individual becomes a member of one of the military services.

CORRECTION OF MILITARY RECORDS

The committee recommends (sec. 555) a provision which allows the Secretary of a military department, or in the case of the Coast Guard, the Secretary of Transportation, to make corrections to an enlisted member's records on the promotion or enlistment of the member to an initial or next higher grade. Corrections authorized under this section may be made only in favor of the member concerned.

PAYMENT OF PENALTIES RESULTING FROM ERRONEOUS DIRECT DEPOSITS

The committee recommends (sec. 556) a provision which authorizes the Department of Defense to pay penalty charges incurred by Department of Defense personnel because of erroneous direct deposit transfers. Payment of such penalties would be from the appropriations accounts used to pay military and civilian personnel of the Department of Defense.

AUTHORITY OF THE SUPERINTENDENT OF THE UNITED STATES MILITARY ACADEMY TO CONFER THE DEGREE OF MASTER OF ARTS IN LEADER DEVELOPMENT

The Department of Defense has requested authority for the Superintendent of the United States Military Academy to confer the degree of Master of Arts in Leader Development upon graduates of that program who have fulfilled the requirements of that degree. The committee recommends (sec. 557) approval of the request.

As a related matter, the committee urges the Secretary of Defense to review the degree to which ethical situations that are or could be faced by military officers in the course of their professional careers are addressed in the curricula of the military service academies and to report to the Senate and House Armed Services Committees the results of the review. The committee believes such a review would be consistent with the Management Review that the Secretary of Defense submitted to the President, which recommends, among other things, a stronger program to encourage ethical conduct in the Department of Defense.

HUMANITARIAN TRANSPORTATION OF POW/MIA FAMILIES

The committee recommends (sec. 558) a provision authorizing the Secretary of Defense to provide transportation for the next-of-kin of individuals who have been prisoners of war or missing in action in the Vietnam War to an annual meeting in the United States. This authority makes clear that the Department of Defense may use funds otherwise available to transport such next-of-kin to an annual meeting.

CLARIFICATION OF PROCEDURES REGARDING SOLICITATION AND AWARD OF CONTRACTS FOR POSTSECONDARY EDUCATION

The committee recommends (sec. 559) a provision that would amend section 1212 of the Department of Defense Authorization Act for Fiscal Year 1986. The provision clarifies the intent of the original section concerning procedures for the solicitation, contract, or agreement for the provision of off-duty postsecondary education services to eligible personnel of the Department of Defense.

EMPLOYMENT OF CIVILIAN PROFESSORS AT THE MARINE CORPS UNIVERSITY

The committee recommends (sec. 560) a provision that would expand the current authority provided to the Secretary of the Navy to employ civilians as professors, instructors and lecturers at the Naval War College to include such employment for the Marine Corps University.

AUTHORITY FOR COMMERCIAL SALE OF A RECORDING BY THE AIR FORCE SINGING SERGEANTS AND THE CINCINNATI POPS ORCHESTRA

The committee recommends (sec. 561) approval of a provision that would grant a one-time, specific authority for the release for commercial sale of a recording by the Air Force Singing Sergeants with the Cincinnati Pops Orchestra during a community relations performance.

EXTENSION OF CERTAIN EXPIRING AUTHORITIES

The committee recommends extension of a number of expiring authorities to September 30, 1992:

(1) (Sec. 505) authority to repay educational loans to attract certain health professionals to serve in the selected reserve;

(2) (Sec. 505) authority to award constructive credit for grade determination purposes for appointment of certain medical officers in the Army and Air Force Reserve;

(3) (Sec. 505) authority to allow promotion of certian reserve officers who would otherwise be ineligible for promotion because of service on active duty;

(4) (Sec. 505) authority to enlist single parents into the reserve components from the active forces;

(5) (Sec. 505) authority to adjust mandatory retirement dates of certain reserve component officers to exclude constructive service credits;

(6) (Sec. 630) authority to pay enlistment and re-enlistment bonuses in the reserve components to aid recruiting and retention;

(7) (Sec. 630) authority to continue to pay special pay for nuclear qualified officers, nuclear accession bonuses, and nuclear incentive bonuses; and

(8) (Sec. 533) authority for the Department of Defense to reimburse personnel for adoption expenses so that the test of this program can be completed.

In addition, the committee recommends (sec. 533) making permanent the authority of the Navy to make temporary promotions to the O-4 grade in certain critical skills.

ALLEGED MISMANAGEMENT OF RAMSTEIN AIR BASE OFFICER AND NCO CLUBS

The committee directs the Secretary of Defense to report to the committee on the alleged mismanagement of the officer and NCO clubs at Ramstein Air Base from 1984 to 1987 that is apparently documented in a Department of Defense Inspector General report and in a number of Air Force Audit Agency reports. The committee requests that the Secretary of Defense specifically address disciplinary and corrective action taken in the report and that the report be provided to the committee as soon as possible.

TITLE VI—COMPENSATION AND OTHER PERSONNEL BENEFITS

MILITARY PAY RAISE FOR FISCAL YEAR 1990

The committee recommends (sec. 601) approval of the 3.6 percent pay raise requested by the Department of Defense for military personnel effective January 1, 1990.

The committee notes that the requested pay raise for military personnel is less than the projected wage growth in the private sector, as measured by the Employment Cost Index (ECI), of 4.3 percent. Using this measure, the gap between military and private sector pay increases has grown from relative comparability in 1981 to 11 percent. This gap is of concern to the committee.

The committee expects the next annual report on the adequacy of the pay and allowances for members of the uniformed services, required by section 1008, title 37, United States Code, to address analytically the appropriate standard for comparing total military compensation to private sector compensation and the appropriate method for determining military pay raises on a systematic, permanent basis.

AVIATOR CAREER IMPROVEMENTS

The committee recommends several provisions directed at improving the retention and utilization of military aviators. These provisions were developed on the basis of the aviator retention report submitted to the committee on December 1, 1988 as required by the National Defense Authorization Act for Fiscal Year 1989; a hearing the Subcommittee on Manpower and Personnel held on these provisions; and inputs received from individual military aviators from each military service. The committee believes that, together, these provisions provide a reasonable balance between the expectations of individual military aviators and the needs of the military services. The committee also believes that these provisions will improve the retention of military aviators to levels that will eliminate projected shortages in the Navy and the Air Force.

The specific provisions are summarized below:

1. *Aviation Career Incentive Pay (ACIP).*—The committee recommends (sec. 621) the restructuring and enhancement of aviation career incentive Pay authorized by section 301a, title 37, United States Codes. Specifically, the committee recommends increasing the rate of aviation career incentive pay in the retention sensitive years, especially for aviation service over six year (from $400 per month to $650 per month). The provision would also smooth out the rates for aviators who have over 18 years of aviation service to eliminate pay inversions that result from the current steep reduction in rates.

Concurrently, this provision would require aviators to perform more years of operational flying duty in order to draw continuous monthly ACIP. Under the current ACIP structure, aviators must perform six of the first 12 years of aviation service and 11 of the first 18 years of aviation service in operational flying duties in order to draw continuous monthly ACIP. The provision would increase the operational flying requirement to 9 out of the first 12 years of aviation service and 12 out of the first 18 years of aviation service, respectively. The committee believes this change ensures an equitable return on the government's investment in the training and qualification of military aviators, and is consistent with the desires of aviators to spend the majority of their career in operational flying assignments.

The Department of Defense is expected to fund the increases authorized by this section within the amounts provided for the military personnel appropriation for fiscal year 1990.

2. *Aviator Retention Bonus.*—The committee recommends (sec. 622) extension of the expiration date of the aviator retention bonus that was authorized on a temporary basis in the National Defense Authorization Act for Fiscal Year 1989 to September 30, 1992. The committee expects that the other improvements being recommended, operating in synergy with the bonus, would improve manning in aviation skills over the next few years to a point where the bonus can be phased out.

3. *Reduction in Nonoperational Flying Positions.*—The committee recommends (sec. 532) a provision that would require the Department of Defense to reduce the number of nonoperational flying positions in the military services by five percent (two percent in fiscal year 1991 and three percent in fiscal year 1992). The committee believes the number of nonoperational flying positions in the military services to be excessive and inadequately justified.

4. *Minimum Active Duty Service Obligation for Aviators.*—The committee recommends (sec. 533) a provision that would establish minimum active duty service obligations of nine years for fixed wing jet pilots and seven years for all other aviators. These obligations would begin upon completion of undergraduate aviation training, and are established to provide a reasonable return on the considerable investment made in the training and qualification of military aviators.

5. *Aviator Insurance.*—The committee recommends (sec. 655) a provision that would require the Secretary of Defense to submit a proposal to the committee that would provide $100,000 in accidental death insurance for military aviators performing operational flying. The committee believes this provision appropriately recognizes the inherent risks in military flying.

6. *Report on Aviator Assignment Policies and Systems.*—The committee recommends (sec. 534) a provision that would require the General Accounting Office to evaluate the aviator assignment policies and systems of the military services and to report to the committee on the effectiveness and efficiency of the policies and systems in assigning aviators to aviator positions and in accommodating individual preferences within the operational needs of the military services. The committee believes this provision is needed to address the substantial and serious dissatisfaction expressed by a

large number of military aviators about the lack of assignment visability and their perception that the assignment system is preoccupied with filling squares with little regard to individual preferences. The committee does not expect 100 percent satisfaction; however, the committee believes the military services can do better in this area.

7. *Commission on the National Shortage of Aviators.*—The committee recommends (sec. 656) a provision that would express the sense of the Senate that the President should convene a commission composed of airline industry, Department of Defense, and other interested parties to address the problem of the shortage of aviators in this country. The committee believes that this problem, which is also a problem in a number of other countries, merits such an effort.

MEDICAL OFFICER SPECIAL PAY

The committee remains concerned over the lack of agreement within the Department of Defense and the military services on an appropriate approach to a comprehensive compensation plan for medical officers within the Department of Defense. The committee is closely following this issue and has asked the Deparment for considerable data to help in evaluating a long-term approach to this problem.

Recognizing the necessity of action now, the committee recommends (sec. 623) a provision increasing the value of the current system (variable, additional, and board certified special pays) by approximately 35 percent. This increase roughly restores the value of those special pays to the percent of total compensation they were designed to represent when the system was implemented in 1980. No other increases have occurred since implementation of the program.

Additionally, the committee is still interested in the potential value of a multi-year component in a physician special pay. The temporary bonus authority provided by the National Defense Authorization Act for Fiscal Year 1989 is the first test of such a concept. In order to allow sufficient time and data collection to evaluate the effectiveness of this plan, the committee recommends a provision (sec. 624) which extends this authority for one additional year. No physician should be compensated at a rate higher than a civilian counterpart, and the bonus levels of the fiscal year 1989 bonus program, including incentive special pay, should not be exceeded.

During the course of the next year, the committee will carefully review the effects of these changes and use this information in evaluating the total military medical compensation program.

NURSE ACCESSION BONUS

The committee remains concerned about maintaining adequate staffing levels of nurses in the military medical care system. The committee recommends (sec. 625) a provision which provides authority for a one-year test of a nurse accession bonus not to exceed $5,000. The Secretary of the military department concerned may pay such a bonus to a qualified nurse who agrees to accept a commission and to serve on active duty for at least four years.

NURSE CANDIDATE PROGRAM

The committee recommends (sec. 626) a provision that authorizes a nurse candidate program which targets junior and senior Bachelor of Science nursing students. This program provides an accession bonus and a monthly stipend for a period not to exceed 24 months. The active duty service obligation incurred for such assistance would be five years for assistance starting in the junior year and four years for assistance starting in the senior year, with the remainder of the eight-year period served in the Selected Reserve.

The amended budget request contained funding for a test of this program by the Navy. Should any of the other services decide to exercise this new authority, they should notify the Senate and House Armed Services Committees 90 days in advance of such implementation and identify the source of funding.

NURSE ANESTHETIST INCENTIVE PAY

The committee is aware that the Department of Defense is experiencing difficulty attracting and retaining qualified certified registered nurse aneshetists (CRNAs). In order to compete for these individuals and in recognition of their additional specialty training, the committee recommends (sec. 627) a provision which establishes a new section in title 37, United States Code, authorizing incentive pay of up to $6,000 per year for nurse anesthetists. Recognizing that compensation alone does not adequately address the professional concerns of CRNAs, the committee directs the Department of Defense to develop uniform guidance concerning the practice, environment, and supervision of nurse anesthetists in the military medical care system.

MEDICAL SPECIALTY PAY FOR RESERVISTS

The committee recommends (sec. 628) a provision which authorizes increased pay for reservists when on active duty for training. This provision addresses difficulties in attracting and retaining certain medical specialists in the reserves.

INCREASE OF THE CEILING ON PAYMENT OF SELECTIVE REENLISTMENT BONUSES

The Department of Defense requested authority to increase the ceiling on selective reenlistment bonuses for enlisted personnel. The current ceiling, provided for in section 308(a) of title 37, United States Code, is six months of basic pay multiplied by the number of years of additional obligated service, not to exceed six years or $30,000, whichever is less. The Department of Defense requested that the six months in the formula be increased to 10 months and the limit be increased to $45,000, whichever is less.

The committee recommends (sec. 629) approval of the request. The committee expects this increased authority to be used only to improve the retention of enlisted nuclear personnel in the Navy.

FUNDED TRAVEL DURING SHIP CONSTRUCTION

The Department of Defense requested authority to expand the authority under section 406b, title 37, United States Code, which permits funded travel for members of the uniformed services between homeports and other ports where the ships they are assigned to are undergoing overhaul or inactivation, to include members assigned to ships undergoing construction. The committee recommends (sec. 631) approval of the request.

REIMBURSEMENT OF PARKING AND TOLL FEES

The Department of Defense requested authority to provide for the reimbursement of parking fees, ferry fares, and bridge, road, and tunnel tolls incurred by members of the uniformed services incident to authorized, official travel. The committee recommends (sec. 632) approval of the request.

DEPENDENT STUDENT TRAVEL—ALASKA AND HAWAII

The Department of Defense requested authority to expand the authority under section 430, title 37, United States Code, which currently permits one funded annual roundtrip for certain dependent students of members of the uniformed services assigned overseas between the overseas location and the United States, to include travel between the contiguous United States and Alaska and Hawaii. The committee recommends (sec. 633) approval of the request.

SURVIVOR BENEFIT PLAN IMPROVEMENTS

The committee recommends several provisions that would make certain improvements in the survivor benefit plan (SBP) for military personnel authorized under subchapter II, chapter 73, title 10, United States Code.

Specifically, the committee recommends (sec. 641) that the formula for calculating the premium charged to uniformed service personnel who participate in the plan be changed from the current two tier formula (2.5 percent of the first $300 of retired pay designated for SBP, as adjusted from time to time, plus 10 percent of the remaining amount of retired pay designated for SBP coverage) to a flat rate formula of 6.5 percent of retired pay designated for SBP. The committee makes this recommendation on the basis of a cost-benefit review of SBP conducted by the Office of the Actuary of the Department of Defense. This review indicated that the premium adjustment was appropriate to preserve the design balance between member contribution and government subsidy of SBP benefits. The net effect of the change will be to reduce the cost of SBP to participants, and hopefully to increase participation in the SBP program.

A recommended provision (see. 642) would also establish a supplemental option to the current SBP benefit structure. Currently, SBP recipients are entitled to 55 percent of SBP designated retired pay until age 62, at which point the benefit is reduced to 35 percent of SBP designated retired pay beyond age 62. The supplemental option would allow participants to elect a level benefit of 55 percent of SBP designated retired pay after age 62. The premium structure for the supplemental option is to be developed by the Department of Defense on an actuarily neutral basis. The committee believes the supplemental option fills a need by certain SBP participants for additional coverage beyond age 62, the age at which social security benefits normally become available.

The committee also recommends certain other modifications (secs. 643 and 645) to the SBP, such as clarification that survivors of active duty members who are eligible for SBP are entitled to calculation of benefits on the basis of the grade of the deceased member at time of death, regardless of the length of time served in that grade, unless authorized a higher grade on which the calculation could be made under other provisions of law.

Save pay and open season provisions (secs. 644 and 646) are included to preclude current participants from incurring higher premiums, to encourage higher participation in the SBP program, and to allow those currently enrolled in the program to take advantage of the new option. The committee urges the Secretary of Defense to aggressively advertise and encourage participation in the SBP program, especially during the open season.

INCREASE OF THE LIMIT ON ADDITIONAL EDUCATIONAL PAYMENTS

The Department of Defense requested authority to increase the limit on additional educational payments that the military services can pay in addition to G.I. Bill benefits. The current limit, provided for in section 1415, title 38, United States Code, is $400 per month. The Department of Defense requested that the limit be increased to $700 per month.

The committee recommends (sec. 651) approval of the request and directs that application of the new limit be restricted to the Army. The committee further directs the Secretary of the Army to report on the effectiveness of this new authority in increasing the quality and quantity of recruits to the Army and to collect data so that the performance of the program can be evaluated against civilian service programs in the future.

In making this recommendation, the committee took into account the difficulty the Army has been experiencing in recruiting personnel in the average or above mental categories. The committee is aware that the other military services also face a challenging recruiting environment; however, the Army is generally the first to feel the decline in the recruiting marketplace. The committee is interested in the recruiting performance of the Army under the increase being provided and may consider removing the restriction on application of the new limits in the other military services if recommended by the Secretary of Defense.

Finally, the committee supports the current test of the Army's Two-Year College Fund. Under this test, the Army plans to offer high quality enlistees in critical skills an enlistment option of 2 years active duty, followed by 2 years in the Selected Reserve and 4 years in the Individual Ready Reserve. The committee directs the Army to report on the results of this test to the Armed Services Committees of the House and Senate by October 1, 1990. The committee is particularly interested in the attractiveness of this enlistment option relative to federal and state post-secondary education assistance programs that do not require a period of military service as a prerequisite.

SUBSIDY FOR DEPENDENT SCHOOL MEAL PROGRAM OVERSEAS

The Department of Defense requested authority to provide a subsidy to the dependent school meal program for Department of Defense Dependent Schools overseas so that the price of meals does not exceed the average price of meals in American public schools.

The committee recommends (sec. 652) approval of the request.

GOVERNMENT MEAL RATES FOR CERTAIN PERSONNEL

The Department of Defense requested authority to permit the Service Secretaries to exempt certain categories of individuals from paying the full meal rate for meals consumed in a military dining facility when it is in the interest of the government or unusual circumstances deem such exemption. The committee recommends (sec. 653) approval of the request.

INCREASING UNIFORM ALLOWANCE FOR CIVILIAN EMPLOYEES OF THE DEPARTMENT OF DEFENSE

The uniform allowance for those Department of Defense employees who are required by regulation or statute to wear a prescribed uniform in the performance of official duties and who are not furnished a uniform is not more than $125 per year. This allowance amount has not been increased in over 20 years. The committee recommends (sec. 654) a provision which increases the yearly allowance to not more than $400 per year.

TITLE VII—DEPARTMENT OF DEFENSE MANAGEMENT MATTERS

IMPLEMENTATION OF THE DEFENSE MANAGEMENT REVIEW

On July 11, 1989, Secretary of Defense Cheney released a report entitled *Defense Management: Report to the President*, which was prepared in response to the President's direction in National Security Review 11. The management review attempts to establish a framework for implementing initiatives from the Packard Commission, the Goldwater-Nichols Department of Defense Reorganization Act of 1986, and other recent legislation. The management review emphasizes the need for long range planning and budgeting, attainment of milestone objectives in the acquisition process, clear command channels, streamlined acquisition procedures, program stability, personnel enhancements, and accountability.

The management review contains the potential for significant reform, but the proposals therein, like those of the Packard Commission, consist primarily of broad principles which can be furthered—or frustrated—in the implementation process. Last year, for example, the committee included a provision in the National Defense Authorization Act for Fiscal year 1989 inviting the Department of Defense to describe its regulatory reform efforts and to detail legislative impediments to the acquisition process. The committee received a report that was insubstantial and incomplete.

The committee is hopeful that the new management team will put a greater emphasis on implementation of acquisition reform. One area that needs particular attention is management of the Defense Acquisition Regulatory (DAR) Council, the body responsible for drafting most of the Department's acquisition rules. Although the Under Secretary of Defense for Acquisition is responsible for the DAR Council, only a handful of the Under Secretary's staff have direct management authority over the activites of the Council—whose membership largely reflects the interests of the military departments and the defense agencies.

The management review calls for an examination of the process by which regulations are issued, and a thorough review of the composition and procedures of the DAR Council must be a primary component of this effort. The Department should give careful consideration to the recommendations of the DoD Deputy Inspector General, who stated in hearings before the committee that the Department "should make sure that the DAR Council is adequately staffed and given clear direction. As a safeguard against perceptions that Council members are overly interested in safeguarding their parent agencies prerogatives, the appraisal of their performance should be done solely by the Under Secretary of Defense for Acquisition."

The committee intends to conduct detailed oversight of the Department's activities in response to the management review, and recommends a provision (sec. 701) requiring the Secretary to provide a detailed report on the actions taken to implement the review. This report should include a comprehensive status report on all organizational changes, personnel reductions, regulatory changes, and legislative proposals related to implementation of the management review.

BUDGETS FOR UNIFIED AND SPECIFIED COMMANDERS

The committee has reconsidered the issue of budgets for the unified and specified combatant commanders. This issue was originally raised by section 211 (10 U.S.C. 166) of the Goldwater-Nichols Department of Defense Reorganization Act of 1986. Last year in the National Defense Authorization Act For Fiscal year 1989, the Congress mandated a report on the establishment of a small budget that would be managed by the Chairman of the Joint Chiefs of Staff but which would be controlled for execution by the commanders of the unified and specified combatant commands. That report has been carefully considered, and the committee remains convinced that some fund should be available for use by the combatant commanders for unforeseen requirements in which the prompt availability of small amounts of monies would enable the commanders to take advantage of opportunities which are not amenable to the time consuming reprogramming process that would otherwise pertain.

Accordingly, the committee authorizes the establishment of a fund under the management of the Chairman of the Joint Chiefs of Staff in the amount of $10 million for use pursuant to the requests of the combatant commanders for specified activities, including joint exercises, force training, contingencies, selected operations, command and control, international military education and training, and attendance of defense personnel of developing countries at regional meetings.

The committee directs that such fund may only be utilized for activities for which funding is not available under existing authorizations and appropriations. In order to enable the committee to assess the utility of such fund and to determine the desirability of making this authority permanent, the Chairman of the Joint Chiefs of Staff, after consultation with the combatant commanders, is directed to submit a report to the Senate and House Committees on Armed Services by June 1, 1990 detailing the activities underwritten by the fund, the benefits derived from those activities, and the recommendations of the Chairman and the combatant commanders as to the desirability of and funding level for such fund in future years.

ESTABLISHMENT OF POSITIONS AT APPROPRIATE LEVELS OF THE EXECUTIVE SCHEDULE

Last year, as part of the National Defense Authorization Act for Fiscal year 1989, Congress created the position of Assistant Secretary of the Air Force for Financial Management and increased the number of Air Force Assistant Secretaries from three to four. That same act, in recognition of the importance of the positions, required Senate confirmation of the General Counsels of the Military Departments. Finally, the President has recently exercised the discretion provided in the Goldwater-Nichols Department of Defense Reorganization Act of 1986 to choose not to designate the Comptroller of the Department of Defense as an Assistant Secretary of Defense.

The legislation relating to the five positions referred to above did not make corresponding amendments to address the appropriate status of these positions in the Executive Schedule. Section 704 provides that the Comptroller of the Department of Defense be placed at level III of the Executive Schedule and that the General Counsels of the Military Departments and the Assistant Secretary of the Air Force for Financial Management be placed at level IV of the Executive Schedule, which is in keeping with the scope, authority and importance of their respective duties.

ASSIGNMENT OF FORCES

Section 162 of title 10, United States Code, as added by the Goldwater-Nichols Department of Defense Reorganization Act of 1986, requires the assignment of all forces, with specific and limited exceptions, to the unified and specified combatant commands. This section was primarily designed to enhance preparation for combat and the formation of effective, integrated fighting forces.

The committee is concerned with the implementation of this mandate in connection with the assignment of tactical air forces in the United States. Previously, the U.S. Readiness Command, a unified combatant command, had command of both Army forces and tactical air forces in the United States. When the U.S. Readiness command was disestablished, it was succeeded in part by Forces Command, a specified combatant command, which only commands Army forces. The tactical air forces were then assigned to the command of three different unified combatant commands, two of which are outside the continental United States. The Tactical Air Command was designated as the "resource manager" on behalf of all three of the combatant commands to whose command its administratively assigned forces were assigned.

In order to enable the committee to determine whether this unique arrangement satisfies the requirements of the law and to facilitate the assessment of the effectiveness of this arrangement in meeting the objectives of the law, the General Acccounting Office (GAO) is requested to review the command arrangements involved. The GAO shall gather information and conduct appropriate analysis so as to determine the extent to which the concerned unified combatant commanders are able to and actually do exercise each of the command authorities set out in sections 164(c), (d) and (e) of Title 10, United States Code, with respect to the tactical air forces assigned to their commands. The committee encourages the Department of Defense to cooperate fully with the GAO in this review and welcomes the submission of comments by the Department of the Air Force, the Chairman of the Joint Chiefs of Staff, and the Office of the Secretary of Defense on the GAO report on this issue.

TITLE VIII—ACQUISITION POLICY AND MANAGEMENT

CRITICAL TECHNOLOGIES PLAN

The committee believes the United States must have a comprehensive science and technology policy both to insure the development of technologies critical to our national defense and to bolster our international economic competitiveness. The committee is deeply concerned that, as a nation, we have not established priorities, even in a broad sense, nor adequately rationalized our investment in science and technology, either on a national security basis within the Department of Defense, or considering our current and future economic competitiveness.

The National Defense Authorization Act for Fiscal Year 1989 directed the Department of Defense to submit a Critical Technologies Plan addressing key critical national security technology issues. The committee carefully reviewed the first Plan submitted by the Department, which identifies 22 key technologies critical to the national defense, and sought the comments of over 50 different government, academic and private sector individuals. While the committee commends the Department on its initial effort, there is a need for substantial improvement in the Department's approach.

Section 801 establishes two new provisions on critical technologies in title 10, United States Code. Section 2508 requires the Director of the Office of Science and Technology Policy (OSTP) to establish a panel of experts to prepare and submit a biennial National Critical Technologies Report on the 30 (or less) product and process technologies considered to be most essential to the long-term national security and economic prosperity of the United States. This report will assess the status and outlook for development of those critical technologies, both in the United States and in foreign countries, including activities in government, academia, and the private sector. The legislation requires the panel to be assembled by the Director of OSTP to be comprised of science and engineering experts drawn from government, private industry, and academia. The committee directs that all individuals participating on the OSTP panel be afforded the opportunity to make dissenting comments in the form of footnotes throughout the National Critical Technologies Report.

Section 2508 also establishes a mechanism to permit the National Academy of Sciences, the National Academy of Engineering, and the National Institute of Medicine to perform in-depth reviews of selected fields of research and development which underlie the development of the national critical technologies selected by the panel. It is anticipated that these reviews will be performed on a continuing basis and will provide an in-depth assessment of the status of the nation's research and development efforts underlying these technologies.

Section 2509 directs the Secretary of Defense, in consultation with the Secretary of Energy, to submit an annual Defense Critical Technologies Plan. This plan is intended to address the Defense Department's overall science and technology program specifically as it relates to the technologies critical to the long-term qualitative superiority of United States weapon systems. The plan should also include Department of Energy technology base programs being conducted at the national laboratories that support or affect the plan. The committee directs that the Secretary of Energy be afforded the opportunity to make any comments either in the form of footnotes or in the form of an annex to the plan. Preparation of this plan should include expert assistance drawn from within the Department of Defense, from other government agencies, federal laboratories, academic institutions, and private industry. The plan will have a long range (15 year) horizon with funding requirements specified for the next five years. The plan will designate priorities for funding, at least to the broad category level, of the critical technologies identified. Recognizing the interdependence between the technology products and the processes required to utilize them, the plan will identify all key associated fabrication and manufacturing processes for each critical technology.

For each critical technology, the plan will provide a summary description of the development program, including milestones, schedule, and required funding, and will designate a lead agent responsible for that technology's development. The committee expects that each lead agent will prepare, and use, more detailed program plans which include all activities, participants, their roles, milestones and schedules, and funding profiles for each critical technology for which they are responsible. Further, the committee expects that these agents will maintain cognizance and coordinate with other development activities associated with their critical technologies.

The committee notes the strong linkage between the Department's programs and initiatives, such as the Balanced Technology Initiative and Competitive Strategies, and the development of critical technologies. The plan should fully consider the needs of these programs and reflect their requirements in terms of critical technologies identified.

Any decision to pursue individual programs within the Defense Department to develop critical technologies must be made in view of the state of development of that technology in the private sector and in government, both in the United States and abroad. Section 2509 requires the Department to make a comparison of the relative positions of the United States, its allies, the Soviet Union, and other industrial nations in the development of each critical technology. It further requires that an assessment be made of the potential contributions that the United States private sector can be expected to make using its own resources.

The committee also believes that the United States must have equitable access to research conducted by our allies and other industrial nations wherever reciprocal access agreements have been reached. The committee is concerned that under too narrow a definition, reciprocal access will not result in equitable access. Access to university and government research institutions may, for example, constitute reciprocal access, but may not be equitable if the most important research is conducted in industry laboratories. Therefore, the committee directs the Secretary of Defense to conduct an assessment of the degree of equitable, symmetrical access that the United States has in dealing with its allies and other industrial nations.

To support the foreign capability assessment, the Secretary of Defense shall establish a panel, with representatives from the Departments of Defense, Energy, Commerce, and State and the National Aeronautic and Space Administration, the National Science Foundation and the Director of Central Intelligence, to assess the U.S. capability to monitor foreign technology developments and provide strategic analysis of what information the federal government should collect in support of maintaining U.S. industrial competitiveness.

CRITICAL INDUSTRIES PLANNING

Testimony received by the committee during recent hearings and concerns expressed in reports prepared by the Office of Technology Assessment (*Holding the Edge: Maintaining the Defense Technology Base,* 1989), the Office of the Under Secretary of Defense for Acquisition (*Bolstering Defense Industrial Competitiveness,* July 1988), the Center for Strategic and International Studies (*Deterrence and Decay: The Future of this U.S. Industrial Base*) and the Defense Science Board (*1988 Summer Study on the Defense Industrial Base*) all create serious concern that the United States is facing an impending loss of its industrial base leadership.

In view of these concerns, the committee recommends a provision (sec. 802) that directs the Under Secretary of Defense for Acquisition to ensure that the Defense Industrial Base Office, established under legislation initiated by the committee last year, specifically examines the industries essential to the sound application of critical technologies for national security purposes.

To assist in assessing the effectiveness of actions taken by the Defense Industrial Base Office, section 802 requires the Under Secretary of Defense to submit a report on the actions taken by the Office for the improvement of the defense industrial base of the United States. As part of the study, the legislation requires the Under Secretary to report on the effect of these financial trends on the capability to produce and make use of the technologies determined by the Secretary to be critical to the national security.

The committee believes that the Under Secretary of Defense should carefully review those financial aspects that are crucial to the continued health and vitality of the defense industrial and technology base. In particular, the committee believes the Under Secretary of Defense should study: (1) the impact of corporate decisions by firms producing items critical for national security to focus on commercial rather than govenment business; (2) the levels of investment and profitability of firms producing such items; (3) the present and potential future impact of mergers, acquisitions, and takeovers on firms producing such items; (4) whether the propensity for short-term planning identified in the Defense Science Board's 1988 study threatens the nation's ability to maintain technological leadership; and (5) whether additional legislation is needed to protect the U.S. defense technology and industrial base.

DEFENSE INDUSTRIAL INFORMATION

The Under Secretary of Defense for Acquisition, in his report on *Bolstering Defense Industrial Competitiveness,* recommended establishing a permanent, institutional mechanism to acquire, analyze, and assess manufacturing and technology data. The report recognized two existing Defense Department programs, the Defense Industrial Network (DINET) and the Defense Intelligence Agency's Project SOCRATES, and called for incorporation of these two programs into a single agency. The committee notes, however, that the fiscal year 1990 amended defense budget request contains no funds for the DINET project and that no single agency has been established.

The Departments failure to develop the capability to analyze the ability to the defense industrial base to fulfill our national security needs is unacceptable. The committee strongly recommends that the Department consolidate existing defense industrial base analysis programs in the Defense Industrial Base Office authorized in section 2503 of title 10, United States Code. Section 803 amends section 2503 to include developing and maintaining such programs as part of the Office charter. This Office should (a) assess and monitor worldwide capabilities in technologies critical to national security and defense-related manufacturing capability; and (b) monitor U.S. defense-related manufacturing capabilities. The information produced should be used to support all acquisition activities carried out by the Department of Defense and should use the proven methodology for technology assessment and tracking already in use in the Defense Intelligence Agency's Project SOCRATES. The committee adds $5 million as initial funding to be specifically used to bring this activity into operation. The committee directs, however, that no additional funding or personnel above that planned for the implementation of DINET and Project SOCRATES be allocted to maintain the consolidated program in the Defense Industrial Base Office.

ARMAMENTS COOPERATION AGREEMENTS

Section 824 of the National Defense Authorization Act for Fiscal Year 1989 (Pub. L. 100-456) required the Secretary of Defense to solicit and consider certain information from the Secretary of Commerce for the negotiation and renegotiation of armaments cooperation agreements between the United States and foreign countries. In particular, the Secretary of Commerce was to provide information or recommendations on the effect of these agreements on the U.S. industrial base. The purpose of this legislation was to ensure that the executive branch considered U.S. commercial interests in the negotiation of armaments cooperation agreements.

The committee is concerned that the Administration has still not formally established inter-agency procedures to implement section 824 of Public Law 100-456. It is especially disappointing that these procedures have not been established despite the Administration's own decision to institute an inter-agency process after its review of the FS–X aircraft agreement with Japan.

In order to strengthen the guidelines under which this inter-agency process will be implemented, the committee recommends a provision that elaborates upon section 824 of Public Law 100–456. The provision essentially consists of three elements.

First, it requires the Secretary of Defense to solicit and consider comments or recommendations from the Secretary of Commerce on an agreement's commercial implications and potential impact on the U.S. competitive position. Second, it authorizes the Secretary of Commerce to request an inter-agency review of an agreement if the Secretary believes that it has, or threatens to have, a significant adverse impact on the U.S. competitive position. If, as a result of this review, the Secretary determines that strategic U.S. commercial interests are not being or would not be served, the Secretary is required to recommend to the President any modification that he believes is necessary to ensure an appropriate balance of interests. Third, it prohibits the adoption or implementation of an agreement if the President determines that it is likely to have a significant adverse impact on U.S. industry that outweighs the benefits of such an agreement. These elements apply to the negotiation, re-negotiation, and implementation of all existing and future armaments cooperation agreements.

OFFSETS IN DEFENSE EXPORTS

In its report (Senate Report 100–326) accompanying the National Defense Authorization Act for Fiscal Year 1989 (Pub. L. 100–456), the committee expressed its deep concern over the harmful effects that offsets in the sale of defense equipment may have on the competitiveness of United States firms, especially those at lower tiers of the defense industry. Several witnesses from both the executive branch and the private sector had testified before the committee that offsets distort the flow of trade and technology by requiring U.S. firms to engage in inefficient commercial practices.

Section 825 of Public Law 100–456 specified several elements of a comprehensive U.S. approach to restricting the adverse effects of offset arrangements. Unfortunately, the executive branch has made almost no progress in implementing the two chief elements of that approach. First, section 825 required the President to establish a comprehensive offset policy. Second, the President was directed to enter into negotiations with foreign countries that insist on offsets in the purchase of U.S. defense equipment. The goal of these negotiations is an agreement to limit the adverse effects that offsets have on countries' defense industries. Section 825 provided that every effort should be made to achieve such an agreement within two years after the enactment of Public Law 100–456.

The committee is disappointed that the executive branch has not taken the necessary steps to establish a policy, much less to initiate international negotiations. The committee continues to believe that the approach specified by section 825 should be pursued vigorously.

A useful forum in which the problem of offsets should be addressed are the negotiations between the United States and its defense allies on their reciprocal defense procurement memoranda of understanding (MOUs). These important agreements facilitate armaments cooperation by allowing U.S. and foreign companies reciprocal access to their governments' defense markets. Several reciprocal procurement MOUs will be expiring in the near future and, therefore, will be subject to re-negotiation.

The committee recommends a provision that directs the Secretary of Defense to raise the problem of offsets in the course of these negotiations on the reciprocal procurement MOUs. In particular, the provision specifies that the Secretary of Defense is to conduct the negotiations on this issue with the goal of securing an agreement to limit the adverse effects that offset arrangements have on the U.S. defense industrial base.

RECIPROCITY IN GOVERNMENT RESEARCH CONTRACTING

The committee is concerned that foreign governments do not allow U.S. companies the same opportunity to bid on their research contracts as the U.S. Government extends to foreign firms. The governments of our trading partners have raised a variety of formal and informal barriers to U.S. bids that exceed those that exist in the United States.

The problem appears to be particularly acute in the case of research on dual-use technologies, such as semiconductors, supercomputers, advanced materials, and software. In this country, government support for these technologies is largely channelled through the Defense Department. Reciprocal defense procurement memoranda of understanding (MOUs) between the United States and its defense allies grant our allies access to research contracts in these fields. Our allies, on the other hand, support these technologies through their civilian research or industry ministries. U.S. access to such research contracts is largely blocked.

The committee is troubled by this lack of reciprocity in the military and civilian research that is sponsored by government agencies. Therefore, it will closely monitor the actions to be taken under section 7003 of the Omnibus Trade and Competitiveness Act of 1988. That section establishes procedures to identify and prevent discrimination against U.S. companies by foreign governments in their procurement of products and services.

In particular, section 305 of the Trade Agreements Act of 1979 (19 U.S.C. 2515), as amended by section 7003 of the Omnibus Trade and Competitiveness Act of 1988, now requires the President to identify annually, starting in 1990, any countries that ". . . maintain a significant and persistent pattern or practice of discrimination against United States products or services which results in identifiable harm to United States businesses. . ." If a country identified by the President does not eliminate its discriminatory procurement practices within 60 days after the President's report, the President is required to impose trade sanctions against that country.

The committee understands from the Office of the U.S. Special Trade Representative (USTR) that research will be one of the services that will be considered in identifying discrimination in government procurement. The committee strongly supports this approach and encourages the USTR to study carefully the problems that U.S.

companies have experienced in bidding for foreign governments' research contracts. If the mechanism established by section 7003 of the Omnibus Trade and Competitiveness Act of 1988 is unsuccessful in achieving reciprocal access to military and civilian research, the committee will consider the need to link this important issue to the negotiation of our reciprocal defense procurement MOUs with our defense and trading partners.

The committee is also concerned that under a narrow definition, reciprocal access may not necessarily result in equitable access. This concern is addressed in the section of the report on the Critical Technologies Plan.

DEPARTMENT OF DEFENSE IN-HOUSE LABORATORY MANAGEMENT

The 1987 Defense Science Board summer study on Technology Base Management found that defense laboratory problems associated with laboratory personnel management, contracting policy, and constraints on the authority of the laboratory directors strongly inhibit productivity in the laboratory community. The study recommended that the Under Secretary of Defense for Acquisition direct each Service to create demonstration projects, using selected laboratories, to assess their operation under an altered management system. These demonstration projects would be designed to attract and retain the highest quality staff, streamline contracting procedures, improve personnel management, and increase laboratory directors' accountability and authority. In testimony provided the committee on March 18, 1988, the Director of Defense Research and Engineering stated that implementation of the Defense Science Board study was the highest single priority for the Deputy Under Secretary for Research and Advanced Technology. The Director indicated the Department's intention to take immediate steps to initiate the demonstration projects and to draft legislation to implement the Defense Science Board recommendations. Unfortunately, this has not yet occurred.

The committee strongly endorses this Defense Science Board recommendation and directs the Department of Defense to proceed with the establishment of the demonstration programs, including appropriate requests to the Office of Personnel Management (OPM) for exceptions to the applicable personnel regulations. The committee directs the Secretary of Defense to provide the Senate and House Committees on Armed Services, not later than 90 days after enactment of this legislation, with a plan for implementing this program, including identification of any legislative actions required for its final execution.

DEFENSE ENTERPRISE PROGRAMS

In section 905 of the National Defense Authorization Act for Fiscal Year 1987, Congress sought to streamline the acquisition process and foster greater authority and accountability for program managers by directing the Secretary of Defense to establish Defense Enterprise Programs. The legislation specified that such programs would have a streamlined reporting chain; the program manager would have greater control over his own staff; and funding authorization would be provided for the entire period between two acquisition milestones. It was the expectation of Congress that properly executed Defense Enterprise Programs would serve as a model from which demonstrated management improvements could be applied generally to acquisition programs in the Department of Defense.

The committee is very disappointed at the manner in which the Department of Defense has implemented the Defense Enterprise Program concept. Although the direct reporting chain from the Service Secretary to the Defense Enterprise Program manager has been shortened in principle, the reality is that commands and activities outside this chain have been able to influence unduly the decisions of such managers through a number of intervention points. The standard matrix support process has been used to provide the technical support staff to such programs, thereby denying the level of control to the enterprise program manager intended in the law. Regulatory relief efforts have been largely underutilized and the designation of a program as a Defense Enterprise Program has sometimes entailed greater reporting and briefing requirements than for non-enterprise programs.

The committee finds most disturbing the fact that the principle of stable funding has been disregarded by the Department for the four programs (Mobile Subscriber Equipment, Army Tactical Missile System, the T-45TS, and Trident II) that were selected for milestone authorization approval and approved by the Congress. In the amended defense budget request for fiscal year 1990, the Department of Defense requested that each authorization be reduced and stretched out. The Department followed its decision on existing programs with a request to the committee to provide a milestone authorization for two additional Defense Enterprise Programs (Delta II and SRAM II). These actions reflect a serious lack of commitment by the Department of Defense to pursue the potential for streamlined management and increased accountability through the Defense Enterprise Program concept. Moreover, because of the funding stretchout proposed by the administration, the committee included a provision (sec. 107) which amends the original milestone authorizations for these four programs.

The committee remains committed to effective implementation of Defense Enterprise Programs by the Department of Defense. The committee notes with approval the support given to the concept in the Defense Management Review and expects vigorous implementation of the actions proposed in it. The committee expects further that the Secretary of Defense will ensure that the focal point for directing the conduct of Defense Enterprise Programs will be the Under Secretary of Defense for Acquisition.

Section 821 of the bill amends the Defense Enterprise Program legislation to strengthen the program by strengthening the authority of the Under Secretary of Defense for Acquisition to waive application of any acquisition regulations not required by statute. The provision would also allow the Secretary of Defense to submit programs entering or in the concept demonstration validation stage as candidates for milestone authorizations. Finally, the provision requires a report by the Secretary of Defense no later than December 1, 1990 describing regulatory efforts to promote the lessons learned from Defense Enterprise Programs more generally in the

Department of Defense, as well as recommendations for changes to legislation to promote the effectiveness of such programs.

In establishing the focal point for the implementation of the Defense Enterprise Programs in the office of the Under Secretary of Defense for Acquisition, the committee intends that high-level management attention be brought to bear on several problems. Policies and guidelines should ensure that Defense Enterprise Program managers have necessary tenure to manage their programs over the long term. To the extent that technical and professional support personnel are probvided to the program manager from another organization, appropriate arrangements should be made to ensure that the program manager has direct control over their activities regarding the program. Finally, the committee directs the Under Secretary of Defense for Acquisition to ensure that Defense Enterprise Program status be a mechanism for affording significant regulatory and reporting relief to program managers.

ACQUISITION OF COMMERCIAL PRODUCTS

The Packard Commission recommended that the Department of Defense use commercial and off-the-shelf products and develop new or custom items only when such existing products are inadequate to meet military requirements. When DoD must make a decision to "make or buy," there should be a presumption to take advantage of existing commercial and off-the-shelf products. In this way, the Department can avoid expensive development costs and take advantage of innovative approaches developed in the commercial market.

Section 907 of the National Defense Authorization Act for Fiscal Year 1987 requires the Department to purchase, whenever possible, "non-developmental items" of "NDIs"—items that are already sold in the commercial market or already in use by the government. Although the provision states that "to the maximum extent practical" DoD requirements should be solicited using functional or performance specifications, the committee notes that many DoD rules and procedures still express a preference for products manufactured to military specifications. The broad use of these specifications discourages the acquisition and use of commercial items.

Although the Department has completed a study assessing the appropriate use of functional and performance specifications, testimony before the committee indicates that the Defense Department's progress in increasing the use of NDIs and eliminating barriers to the procurement of NDIs has been unacceptably slow, and a great deal more needs to be done.

The General Accounting Office and the DoD Inspector General testified that the problem was not one of a lack of authority, but a lack of management emphasis. Specific steps are needed to implement the preference for the acquisition and use of commercial products. Moreover, depsite the enactment of section 907 and specific commitments made by DoD in a 1987 report to this committee, a promised DoD manual on NDI acquisition still has not been issued; a promised revision to the DoD Directive on commercial products still has not been promulgated; a DoD steering group on NDIs has been disbanded; the single DoD staff member responsible for the NDI program has been assigned so many other duties that he has been able to devote only half of his time to NIDs; only about 40 minutes in the Defense Department 20-week training course for program managers has been devoted to NDIs; and a DoD plan to conduct a series of workshops on NDIs at regional training centers has been cancelled.

The committee believes that more forceful and direct action is necessary to encourage the purchase of commercial products and NDIs. Section 822 directs the Department to take the following actions:

(1) limit the clauses required for inclusion in contracts and subcontracts for commercial products to only those required by statute or essential for the protection of the government's interest;

(2) develop a special inspection clause for use in contracts for commercial products;

(3) prescribe new regulations limiting the requirement for certified cost or pricing data in contracts for commercial products;

(4) enhance training for procurement and acquisition personnel in the acquisition of commercial products and NDI.

(5) assign a focal point in each command for the acquisition of commercial products and NDI; and

1. *Contract Terms.*—Despite the mandate of the NDI provision two years ago, the committee is not aware of a single regulation or contract clause that has been modified or eliminated as a result of this provision. On the contrary, numerous unnecessary and burdensome contract clauses continue to be applied—on an inconsistent basis—in contracts and subcontracts for commercial products and NDIs.

The committee believes that the elimination and modification of unnecessary and burdensome contract clauses is one of the most effective means of encouraging the acquisition of commercial products. For this reason, section 822(b) requires the Department to establish a list of contract clauses that are required for inclusion in contracts and subcontracts for commercial products. Under section this provision a contract clause not included in the Secretary's list could be required in a particular commercial procurement only upon a determination by the contracting officer that the clause is essential for the protection of the government's interest in that procurement.

The committee understands that some clauses may be necessary only in commercial contracts or subcontracts above a specified dollar threshold, and this section is not intended to preclude such flexibility.

2. *Inspection.*—Testimony before the committee indicated that the Defense Department's existing inspection procedures have been unsuccessful in preventing significant deficiencies in many products and may impose unnecessary burdens on some commercial manufacturers.

In light of this testimony, the committee believes that DoD should take advantage of other approaches to quality assurance, such as placing greater reliance on commercial warranties and rewarding contractors with a proven record of quality performance. For this reason, section 822(c) requires the Department to develop an inspection clause for inclusion in contrats with commercial suppliers that have a proven record of quality production and offer appropriate warranties. This clause is designed to accommodate the use of quality assurance techniques that have proven effective in the commercial marketplace.

This requirement is not intended to preclude DoD from experimenting with other approaches to the problem of quality assurance in contracts for commercial or non-commercial products. The committee does not believe that the Department should dispense with current inspection requirements without providing a reasonable alternative method of ensuring product quality.

3. *Cost or Pricing Data.*—The Truth in Negotiations Act provides that a contractor need not provide the government certified cost or pricing data where the contract price is based upon established catalog or market prices of commercial items sold in substantial quantities to the general public. However, the committee understands that the regulations interpreting this exception create a rigid test for commerciality which in many cases creates an impediment to the purchase of commercial products.

In particular, existing regulations establish percentage tests for sales to the general public and sales at catalog prices that many commercial products cannot meet. In addition, substantial questions have been raised about the applicability of the regulations to new commercial products, old commercial products, modified commercial products, and spare parts for commercial products.

The Department has advised the committee that it can revise the regulations to address these problems without amending the Truth in Negotiations Act. Section 822(d) directs the Secretary to issue regulations ensuring that a contractor is required to submit cost or pricing data in commercial or competitive procurements only if the head of the agency determines that data is necessary to be determine whether the contract price is reasonable.

The committee directs that this exception only be applied where there is no adequate alternative basis to requesting certified cost and pricing data. Alternatives to requesting cost and pricing data include, but are not limited to, situations where the price is fair and reasonable based on adequate price competition, a price analysis, market research, a review of prices for the same or similar commercial products or services, or other similar techniques.

4. *Training.*—The committee is disappointed in the Department's record of training personnel in the acquisition of NDIs. In particular, the committee understands that only about 40 minutes in the Defense Department 20-week training course for program managers has been devoted to NDIs; a DoD plan to conduct a series of workshops on NDIs at regional training centers has been cancelled; and no NDI training at all has been conducted for contraction officers. Section 822(e) directs DoD to institute more extensive training for all appropriate personnel in the acquisition of NDIs.

5. *Focal Points.*—Section 822(e) directs the Department to establish a responsible official in each contracting activity to ensure that DoD policy on NDIs is implemented by local commands. These officials should play an active role in encouraging the use of commercial and off-the-shelf products; ensuring that command personnel are properly trained in the use of functional and performance

specifications; and challenging regulatory barriers to the use of NDIs. The committee believes that it would be most appropriate to assign this responsibility to the Competition Advocates established by the Competition in Contracting Act. However, this determination is left to the Department.

UNIFORM RULES ON DISSEMINATION OF ACQUISITION INFORMATION

The information made public from "Ill Wind" procurement scandal prosecutions has demonstrated that the Department of Defense lacks clear rules and adequate enforcement procedures to control the release of nonpublic acquisition information. Recent legislation establishes new penalties for improper disclosure of source selection and proprietary information, but leaves the Executive Branch with substantial discretion as to the types of information that should or should not be disseminated as part of the acquisition process.

Controls on the disclosure of sensitive source selection information are necessary in order to ensure that all bidders have equal access to the government's information in the process of competitive negotiations. However, much of the information related to the acquisition process is not sensitive source selection material. There must be a vigorous interchange of information between the government and the private sector in terms of the government's plans and requirements and the capabilities of industry to meet those requirements.

At present, the military departments each have substantially different policies as to the type of information that is made available (i.e., that is not treated as sensitive source selection material), with no apparent basis for the differences related to service needs or missions. A further problem is that many aspects of existing policies are not clearly spelled out in regulations. This is an area in which the Department of Defense should develop comprehensive guidance to ensure that the military departments approach this issue in a clear and uniform manner. Section 823 requires the issuance of a uniform regulation on this subject. The committee expects the Under Secretary of Defense for Acquisition to take the lead for the Department in the issuance of such a regulation.

SIMPLIFIED PROCUREMENT FOR QUALITY PROPOSALS

Section 2505(b)(4) of the Competition in Contracting Act (CICA) does not permit award of a contract based solely on review of initial proposals unless "acceptance of an initial proposal without discussions would result in the lowest overall cost to the United States." The General Accounting Office has interpreted this provision to mean that an award can be made without discussions only to the acceptable offeror with the lowest price. Thus, an agency may not award a contract based on technical superiority unless discussions with the offerors are held.

Although the requirement for discussions is appropriate in competitions where price is the primary evaluation factor, it may create problems in other situations, such as technical and design competitions or in the acquisition of commercial products, where quality is the major consideration in evaluating proposals. In these situations, discussions do not necessarily improve a superior proposal, but may instead result in technical transfusions among offerors so that the competitive field is levelled. Also, this process creates pressure for multiple best and final offers. These factors multiply the potential for fraud and abuse.

The committee is very concerned that the acquisition process, from concept definition through delivery to the field, takes too long, and that it would be useful to permit the Department of Defense to make awards without discussions in appropriate circumstances. Section 824 authorizes use of this procurement technique on a trial basis.

This provision authorizes DoD to conduct a three-year test program to make awards without discussions for property or services in the acquisition of any non-major system. However, the Secretary of Defense is required to limit the number of organizations in the test program to those organizations that, during fiscal year 1989, entered into contracts, the total dollar value of which did not exceed 30 percent of the total dollar value of contracts for the Department of Defense in fiscal year 1989, as determined using existing data systems.

The term "organization" is used in this section to vest the Secretary with broad discretion in selecting entities that may participate in the test. The Secretary may designate any component, element, or subordinate part thereof to participate in the program.

The Department of Defense is directed to evaluate the impact of making an award without discussions on the quality of initial contractor proposals (in terms of price, technical merit, and other factors) and to maintain information on: (1) the effects of awards without discussions on the number of best and final offers and length of the award process; (2) the number of bid protests filed where awards are made without discussions and the results of the protests; (3) the number and dollar value of contracts awarded under this program; and (4) the source selection evaluation criteria used in making the award.

The Secretary of Defense shall evaluate this information and submit a report to the Senate and House Committees on Armed Services on the desirability of retaining or expanding this authority at the conclusion of the test period. The General Accounting Office shall perform a study assessing the Defense Department's use of this authority. These reports shall be submitted to the Committees on Armed Services not later than 180 days after the termination of the test authority to make awards without discussions with offerors.

ACQUISITION REPORT STREAMLINING

The National Defense Authorization Act for Fiscal Year 1987 established a process by which the Secretary of Defense might waive acquisition reporting requirements that were not required by statute, by the Federal Acquisition Regulations, or by the Department of Defense supplement to the Federal Acquisition Regulations. The Department had substantial difficulty implementing the waiver authority. No one in the Department of Defense had established a clear audit trail for the basis of most reporting requirements. No one knew what could be waived.

In a related effort, the military departments contacted selected program managers for major acquisition programs and asked them from which rules and regulations they wished to be released. One military department found that the average program manager was subject to nearly 3,000 regulations and reporting requirements. After reviewing all the requirements, the program managers collectively determined that only 11 reporting requirements were not needed, and each of those 11 were documents required to be submitted to the Congress or to the Office of the Secretary of Defense. The committee finds it astounding that the average program manager is prepared to live with approximately 3,000 regulations and reporting requirements and finds that only those 11 reports required to inform Congress are unnecessary.

Nonetheless, the committee believes that streamlining reporting requirements is justified. The Department of Defense is burdened unnecessarily by excessive regulations and reporting requirements. The committee has worked with the Department in identifying certain avenues for streamlining congressionally-directed reporting requirements. The committee recommends a provision (sec. 825) that eliminates separate quarterly internal unit cost reports by consolidating the management mechanism with the Defense Acquisition Executive Summary reports. The provision also consolidates the external unit cost exception reports by consolidating them with the Selected Acquisition Reports. Finally, the committee action standardizes the cost and baseline reporting threshold for Selected Acquisition Reports, unit cost reports and baseline reports.

The committee welcomes the Secretary's renewed commitment to streamlined acquisition as proposed in the Defense Management Review. The committee will work with the Department in implementing those changes which have merit and which require legislative action. The committee encourages the Department to streamline the voluminous internal reporting documents within the military departments.

DELEGATION OF AUTHORITY FOR APPROVAL OF CERTAIN CONTRACT ACTIONS

The Competition in Contracting Act contains a number of exceptions to the requirement for full and open competition. Under the act, the contracting officer must prepare a justification and approval (J&A) for use of an exception. The statute specifies the level of approval for the exception, depending on the dollar value of the contract.

For contracts of $1 million or less, the approval may be granted by the competition advocate. The head of a procuring activity may take such action on contracts of $10 million or less (and may delegate this authority to a flag or general officer or a civilian of equivalent rank). The approval for a contract of more than $10 million must be granted by the agency's senior procurement executive.

The preparation and review of the J&A is intended to ensure that attention is paid to circumstances when full and open competition is not used. Experience under the Act indicates that a change to the approval levels can be adopted without adversely affecting the proper emphasis on competition. Last year for example, contracting officers prepared approximately 700 such documents for procurements over $10 million. Of these, the senior procurement executives approved all but 55, indicating that contracting officers and officials below the senior procurement executive are properly screening, preparing, and justifying their requests.

The Department of Defense has requested a change in the approval levels in order to remove some of the paperwork burden that is now placed on senior procurement executives by this process. The Department has suggested that the requirement for senior procurement executive approval be raised to $100 million and that the executive should be able to delegate the approval authority to the head of the contracting activity or no lower than a general officer or a GS-16 official.

The committee agrees that an increase in the threshold is warranted, but that a more measured approach should be taken. Accordingly, section 826 permits the senior procurement executive to delegate the approval level for contracts of up to $50 million to heads of procuring activities who are general or flag officers (or civilians of equivalent rank).

Based on last year's statistics, this provision should relieve senior procurement executives from the need to act on more than half of justifications and approvals submitted. This change will permit these high level officials to devote more of their time to procurement policy issues, while ensuring high level attention within the procurement activities to the issue of competition.

The committee will carefully monitor this area to ensure that DoD retains its commitment to the use of competitive procedures and that the integrity of the justification and approval process is maintained.

OPERATIONAL TEST AND EVALUATION

The committee continues to monitor closely the effectiveness of legislation establishing a Director of Operational Test and Evaluation in the Department of Defense and generally requiring that operational testing take place prior to substantial investments in the production of a new weapon system. Recent reports from the Inspector General of the Department of Defense and the General Accounting Office indicate that there have been instances in which dual production lines and other substantial investments have been made in new systems prior to the completion of operational testing without substantial justification for such investments.

In order to clarify the intent of Congress with respect to operational testing, the committee recommends three amendments to the applicable law. The first amendment defines the term "low-rate initial production" to mean the minimum quantities needed for testing and for maintaining a single production line until successful completion of realistic operational testing. The committee recognizes that the unique aspects of shipbuilding may require a different set of rules and provides the Secretary of Defense with discretion to issue appropriate regulations. The second amendment clarifies the definition of operational testing to ensure that operational assessments that rely exclusively on computer modeling, simulations, and document analysis cannot be used as a substitute for realistic operational testing. The third amendment requires the Director of Operational Test and Evaluation to ensure the impartiality of any contractor who assists the Director in the operational test and evaluation of a weapons system.

MASTER AGREEMENTS: CONTRACTS FOR ADVISORY AND ASSISTANCE SERVICES

The Department of Defense has requested authority to use master agreements to facilitate the acquisition of needed study, advisory, and assistance services on a timely basis. While the committee agrees that streamlined procedures are desirable, it is essential that any new procedures ensure adequate competition and prevent conflicts of interests by firms that provide services to the government on a consultant basis. Accordingly, the bill establishes a test program with appropriate limitations.

Section 828 authorizes the Department of Defense to enter into master agreements for study, advisory, or assistance services only where competitive procurement procedures are used. Firms qualifying for master agreements would also compete with one another for task orders issued under each agreement. The proposal representing the best value to the government, price and other factors considered, would receive the order.

Prior to exercising this authority, the Department must issue guidance ensuring that solicitations for master agreements do not consolidate requirements to the extent that they unduly favor larger firms over smaller firms or firms offering multiple services. The statement of work in the solicitation should be precisely drafted so as to encourage the maximum competition for both the master agreement and task orders issued thereto.

The program must be structured so that it is not limited solely to firms that obtain a master agreement at the beginning of the test program; rather, firms should be permitted to compete for other master agreements throughout the duration of the test program. The Defense Department should seek public comment on the proposed test program and any of its regulations.

The Department of Defense may not exercise the authority provided under this provision until it issues final regulations that implement section 8141 of the Department of Defense Appropriations Act for Fiscal Year 1989 pertaining to consultant conflict of interest standards. Also, DoD may not use this authority to contract for any organic governmental function or service that would be inconsistent with OMB Circular A-120. The phrase "organic governmental function" means work of a policy, decisionmaking or managerial nature which is the direct responsibility of agency officials and as used in A-120 and the Department's implementing directive DoD 4205.2 dated January 27, 1986, entitled "Department of Defense Contractor Assistance Services".

The General Accounting Office, after consultation with DoD, is directed to evaluate the test program and submit a report to the Senate and House Committees on Armed Services not later than

270 days after the termination of the test authority. To assist in this evaluation, the Department should maintain information on:

(1) the number of bid protests filed, the number sustained, and the number of awards terminated during the competition for the master agreements and task orders;

(2) this program's effect on reducing the procurement administrative lead time in the acquisition of services;

(3) the statements of work describing the services contracted for and the source selection evaluation criteria used to evaluate proposals for awards;

(4) the level of small business participation in the program; and

(5) the number of contracts where a contractor certifies that a conflict of interest exists under the regulations implementing section 8141 of the National Defense Authorization Act for Fiscal Year 1989, the nature of the conflict of interest, and the steps taken to resolve such conflicts of interests among firms that qualify for master agreements.

In addition, the General Accounting Office shall study the use of advisory and assistance contracts over the same period by contracting activities of the Department of Defense that do not participate in the test program. This study shall cover an equivalent number of contracting activities that are as comparable as possible to the contracting activities participating in the test program. The contracting activities covered by this study shall be designated by the General Accounting Office, in consultation with the Department of Defense.

To assist in this study, the Department shall maintain information in the five categories listed above with regard to contracts for advisory and assistance services awarded by such commands in excess of $2 million (including modifications). The Department of Defense shall also maintain data on the dollar amounts of such contracts, and modifications to such contracts.

Finally, the Department of Defense is directed to provide the Senate and House Committees on Armed Services annually the number of master agreements and task orders awarded during the preceding fiscal year.

The committee expects the Department to closely monitor the test program to ensure that contracting activities participating in the test program in each fiscal year do not exceed 30 per cent of the dollar value of contracts for advisory and assistance services awarded by that activity in fiscal year 1989.

AVAILABILITY OF FUNDS FOR OBLIGATION FOLLOWING BID PROTEST DECISION

When a bid protest is filed at or near the end of a fiscal year, a significant problem arises if the funds intended to be used for the procurement expire and are legally unavailable for obligation after September 30 of that year. By law, bid protest forums have up to 90 days to resolve a protest. Accordingly, if a protest is filed late in the fiscal year, the case may not be decided until after September 30. This causes a hardship for the Department of Defense because, even if the Department wins the protest, no appropriation is available to fund the contract.

To correct this unintended result, section 829 provides that if an appropriation expires while a bid protest is pending, the Department may use the appropriation to fund the procurement for a period of up to 90 working days following the bid protest.

SIMPLIFIED EXECUTION OF DEFENSE TRADE AGREEMENTS

The Competition in Contracting Act contains an exception to the use of full and open competition when a foreign entity makes a request for U.S. defense items that have the effect of requiring the acquisition to be made from a specific source. Despite this exemption from competitive procedures, the contracting officer must nonetheless prepare a "justification and approval" document explaining the basis for using other than full and open competition. This document must then be reviewed and approved by senior acquisition officials.

The preparation and review of a "justification and approval" document places a paperwork burden on acquisition managers when the procurement is directed by a foreign source. Section 830 eliminates this requirement. However, to ensure that this authority is properly used, the head of the contracting activity must include in the file on the contract a written determination of the specific reasons for the foreign request having the effect of requiring the use of other than competitive procedures.

NEGOTIATION OF SUBCONTRACTING PLANS

Under Section 8(d) of the Small Business Act, small businesses and small disadvantaged businesses must be afforded the "maximum practicable opportunity" to participate as subcontractors and suppliers to firms awarded contracts by the federal government. To implement this policy, Section 8(d) requires the negotiation of subcontracting plans with specific goals for small business and small disadvantaged business participation if the value of a contract or a subcontract for construction exceeds $1 million, or $500,000 for other procurements.

Presently, except for firms providing commercial products, subcontracting plans are negotiated on a contract-by-contract basis. The Department of Defense has requested that the Small Business Act be amended to authorize company-wide or division-wide subcontract plans.

The Department anticipates that authorizing negotiation of company-wide subcontracting plans will increase subcontracting with small businesses and small disadvantaged businesses by firms holding multiple contracts with the government. Company-wide plans should also encourage firms to seek small business and small disadvantaged business participation in contracts that support the overall corporate or divisional operation, not just those directly related to the performance of a particular contract. This change should provide a broader range of business opportunities for smaller firms that may not be available on an individual contract basis. The use of company-wide plans also should reduce the paperwork burdens associated with reporting on a contract-by-contract basis, thereby streamlining the acquisition process.

In order to determine whether use of company-wide programs will produce these benefits, the committee has authorized in section 831 a 4-year test program permitting negotiation of subcontracting plans on a company-wide basis. This program is limited to one contracting activity (as that term is defined in regulations) in each component of the Department of Defense.

SMALL BUSINESS ADMINISTRATION CERTIFICATE OF COMPETENCY

Under current law, if a contracting officer determines that a small business is "nonresponsible" and thus ineligible to receive a contract award, this matter must be referred to the Small Business Administration (SBA) for review. This review is intended to ensure that individual small business concerns are afforded an opportunity to demonstrate their capability to perform government contracts. However, the Department of Defense has advised the committee that the review may take 45 to 90 days, during which period the contract may not be awarded and military requirements are not satisfied.

To remedy this problem, the Department has suggested that the Small Business Act be amended to authorize contracting officers to forego referring a case to the Small Business Administration for a responsibility determination where the next contractor in line for the award is a small business.

The committee agrees that avoiding unnecessary delay is desirable; however, individual small business interests must not suffer in this process. Accordingly, section 832 provides that in the case of a small purchase contract ($25,000 or less), a small business may request that the determination of responsibility be referred to the SBA. When such a request is not made, DoD may make the award to the contractor next in line to receive the award. It also provides that a written notice of the small business firm's right to request the SBA review be made a part of the solicitation.

The committee expects that this authority will be implemented in such a way as to assure a small business sufficient information and time to make an informed business judgement of whether to request SBA review of the "nonresponsibility" determination. During this period of time, further action regarding the award of the contract should be suspended.

SMALL AND DISADVANTAGED BUSINESS

In the statement of managers accompanying the conference report on the National Defense Authorization Act for Fiscal Year 1989, the conferees addressed the issue of the use of price differentials in the furtherance of goals for small and disadvantaged business participation in contracts with the Department of Defense. The conferees directed the Secretary of Defense to ensure that price differentials for small and disadvantaged businesses "are tailored to the various segments and tiers of industry so that other small and medium sized companies are not denied a reasonable opportunity to compete, and that price differentials are not used when adequate small and disadvantaged business participation exists within an industry category."

To date, the Department of Defense has failed to issue appropriate implementation rules. Therefore, the committee has recommended a provision amending section 1207 of the National Defense Authorization Act for Fiscal Year 1987 to require the Department of Defense to ensure that small- and medium-sized non-disadvantaged businesses are not denied a reasonable opportunity to compete.

QUALITY IMPROVEMENT PROGRAM

The committee recognizes the significant impact that improving Department of Defense quality assurance can make both within the Department and with its contractors. Expert assessments have predicted that savings in the range from 20 to 30 percent can be achieved, offering a source of substantial savings in this time of constrained funding.

Achieving continuous improvements in quality levels requires the commitment and continuing attention of top management both within the Department and with its industrial base. Such attention can lead to unprecedented levels of achievement and profitability as demonstrated by the Naval Air Systems Command's aircraft rework facilities and private sector firms such as the Motorola and Westinghouse Corporations. The committee commends the Navy for being the first winner of the Presidential Award for Quality and Productivity Improvement, and Motorola and Westinghouse on their receipt of the Malcolm Baldridge National Quality Award.

The committee encourages the Secretary of Defense to continue his committment to improved quality management programs. The committee believes that the Department should devote more attention to establishing criteria and methodologies for properly measuring progress as it continues to improve quality in each of the Defense Department's acquisition programs and in support of fielded weapon systems. The committee also encourages the Department to find ways to share successful insights and innovations within the Department as well as with the defense contractor community. The committee further believes that the Department should find innovative ways to motivate its contractors to improve their quality programs. It recommends that the Department consider using award fees and source selection criteria that emphasize demonstrated quality, qualified manufacturer lists, and the Industrial Modernization Incentives Program (IMIP) as potentially useful mechanisms to provide such motivation.

The committee intends to maintain close oversight of the Department's quality improvement program and anticipates holding annual hearings to assess program progress as well as to consider any changes to legislation.

PROCUREMENT TECHNICAL ASSISTANCE COOPERATIVE AGREEMENT PROGRAM

Since 1985, the Deparment of Defense has had the authority to enter into cooperative agreements with state, local, or non-profit organizations to establish procurement technical assistance centers.

These centers are intended to help businesses compete for Department of Defense contracts by providing assistance in locating bidding opportunities and in setting up proper accounting, quality assurance or other management systems.

For fiscal year 1989, the authority under the program was amended to provide that the Department of Defense may pay up to a $300,000 share of the cost of operating a center serving a statewide area, rather than a $150,000 share. This change could result in a reduction in the number of centers that can be funded under the program at the $7 million level authorized in each of the last two fiscal years. For that reason, the committee authorizes an increase in funding to $9 million in each of fiscal years 1990 and 1991 to allow the program to continue without a significant reduction in the number of centers.

The committee reauthorizes the provision requiring that a specific amount of the funds in each of fiscal years 1990 and 1991 be used to fund centers sponsored by native American tribal organizations, increasing the amount from $500,000 to $600,000. The Department of Defense has also been authorized to fund up to $300,000 of the cost of such centers which serve more than one of the twelve Bureau of Indian Affairs regions in the United States.

QUALITY AND DELIVERY PERFORMANCE

The committee received testimony indicating that the Defense Department does not place enough emphasis on contractors' past performance and quality in evaluating proposals for awards. Cost is a factor that must always be considered, and the contracting officer must have ample discretion to decide how to structure the award process to ensure adequate consideration of non-price related factors such as quality and past performance.

The Air Force Logistics Command has established a Competition for Performance Program (known as Blue Ribbon Contracting) in which contractors may receive up to a 20-percent price differential in their proposals based on past product quality and delivery performance. Under this program, an award may be made to other than the low-priced offeror. The committee understands that this is a new program that was developed for spare parts acquisitions and is limited to firm-fixed price contracts under $2 million.

The Under Secretary of Defense for Acquisition is requested to provide the Senate and House Committees on Armed Services a report not later than May 1, 1990, evaluating the program's effectiveness in providing for quality procurements and its suitability for expansion throughout DoD to larger dollar buys, different contract types, and procurements other than spare parts.

MULTIPLE BEST AND FINAL OFFERS

The committee received testimony indicating that requests by federal agencies for multiple best and final ofers (BAFOs) have had the effect of lengthening the acquisition process, causing the technical leveling of proposals, and encouraging "cost auctions." The Department of Defense issued a regulation to address this problem on August 16, 1988, and imposed new restrictions and approvals for the use of multiple BAFOs. While the committee believes that this is a step in the right direction, testimony indicates that continued attention to this area is warranted.

The Under Secretary of Defense for Acquisition is directed to submit to the Senate and House Committees on Armed Services by March 31, 1990, a report assessing whether the August 1988 regulation has discouraged the use of auction techniques, protected the integrity of the source selection process, and ensured that contracts are awarded fairly and promptly. The committee understands that changes in requirements or funding may necessitate a second or subsequent request for BAFOs. However, if proper planning occurs before the initial request for a BAFO, multiple BAFOs should be the exceptional case. The report should provide the total number of requests for multiple BAFOs, the number of requests that cite changed requirements or funding as reasons for multiple BAFOs, the Under Secretary's assessment of these figures, including a determination as to whether additional regulatory coverage is needed, and the Under Secreary's views on whether the regulation has limited the number of multiple BAFOs and streamlined the award process.

The committee also notes that when a contracting officer issues a contract modification, contractors are required to reprice their proposals. Numerous modifications may be issued before the initial request for a BAFO. Thus, because modifications require new contractor price proposals, requesting numerous modifications may have the same effect as multiple BAFOs. The report should discuss the susceptibility of the system to be abused in this manner and whether any corrective actions are warranted at this time.

THE ACQUISITION WORKFORCE

Management of the defense acquisition process is one of the most difficult tasks in government. The procurement process must accommodate transactions ranging from the daily acquisition of mess hall supplies to development of the most sophisticated weapons systems. Each year, the Department of Defense engages in nearly 15 million acquisition transactions, involving procurements worth more than $150 billion.

The challenge of managing a system so vast and complex has been complicated by the erosion of confidence in the acquisition process. Budget instability has created a situation in which program managers are unable to make the long term plans that are necessary for an efficient and effective procurement process. The "Ill Wind" procurement scandal is but the latest in a series of problems, such as deficiencies in spare parts management, operational testing, competitive procedures, and substitution of defective products, which have led to major changes in the laws and regulations that govern DoD procurement. As the committee has noted in the past, the result has been regulatory overload. Managers are forced to spend excessive time revising and disseminating procedural changes to the detriment of their ability to manage their programs.

Sound management of the defense acquisition system would be a daunting challenge in the best of circumstances. Under current conditions, it requires acquisition personnel of the highest caliber.

As noted earlier in the report under the findings of the Subcommittee on Defense Industry and Technology, addressing the problems of the acquisition workforce is one of the most important steps that can be taken to enhance the prospects for effective acquisition reform. Although a comprehensive solution to these problems may require action on a government-wide basis, a number of specific actions can be taken at this time to address the unique needs of the Department of Defense.

ALTERNATIVE PERSONNEL MANAGEMENT DEMONSTRATION PROGRAMS

In 1986, the Packard Commission noted that retention of acquisition personnel could be improved by establishing a more flexible, performance-oriented system for pay and promotions. The Commission added that "[o]ne extremely important means to improve the acquisition workforce is to establish an alternative personnel management system permitting greater flexibility with respect to the status, pay, and qualifications of civilian employees."

Section 841 authorizes the Department of Defense to establish four demonstration programs using alternative personnel system. A ceiling of 35,000 employees would be set in two of the programs, and a ceiling of 25,000 in the remaining two, with a total ceiling of 100,000 in all four programs. The provision would also authorize the Department of Energy to establish one program for the Department's national security programs. Employees could be paid at a salary ranging from their pay immediately prior to implementation of the program to the pay at level V of the executive schedule. Each demonstration program must be neutral in its budgetary impact; that is, the total cost of the demonstration program may not exceed what the total cost of the program to the Government would have been, during the same period, if section had not been enacted. The General Accounting Office is required to make periodic reviews and reports to Congress on the operation of these programs.

MANAGEMENT OF MILITARY ACQUISITION PERSONNEL

In National Security Review 11, "Defense Management", the Secretary of Defense reported to the President that "[n]ew means must . . . be found to develop and retain the variety of necessary acquisition skills in the military, while at the same time ensuring that the development of weapon systems reflects keen regard for operational realities." The Secretary directed the military departments to provide him by October 1, 1989, with plans for establishment of "a dedicated corps of officers in each service who will make a full-time career as acquisition personnel specialists." This initiative is a welcome and natural progression from the actions taken by the Department pursuant to existing legislation relating to procurement management personnel. The committee further notes that a number of promising programs for the management, education, and training of acquisition personnel are set forth in the Management Review.

In order to ensure timely legislative action that may be needed to further development of an acquisition corps, the Secretary of Defense is directed to submit a report to the Senate and House Armed

Services Committees on December 1, 1989, with supplements on March 1, 1990 and June 1, 1990 detailing the steps taken by the report date to establish the dedicated corps in each Service; the career guidelines or standards established for corps personnel in the areas of selection, education, training, types of duty assignments, and promotions; and any legislation that may be proposed to facilitate such action.

As part of the March 1 report, the Secretary shall include the following information on the implementation of current statutory requirements applicable to senior acquisition officials:

> (1) For each Military Department, the number of personnel assigned to duty as (a) program managers, and (b) a general or flag officer in a procurement command; the number of such personnel in each category who have completed the program manager course at the Defense Systems Management College; the average number of years of experience of personnel in each category in the acquisition, support, and maintenance of weapons systems; the average number of years of assignment of such personnel to a procurement command; and the number of personnel in each category for whom waivers were granted with a brief description of the reasons for such waivers.
>
> (2) The separate views of each of the Secretaries of the military departments as to the continuing need for the authority to waive the requirements for procurement management personnel and, if there is a continuing need, the anticipated duration of such need.
>
> (3) A review by the Secretary of Defense of (1) and (2) above, as well as the views of the Secretary of Defense on the need for any additional legislation relating to the qualifications of procurement management personnel within the military departments.

The Management Review also establishes a plan of action for a streamlined chain of command and clearly defined authority and functions of Service Acquisition Executives, Program Executive Officers, and Program Managers within the military departments. That action is in furtherance of the Packard Commission's recommendations and should assist in bringing the military departments into compliance with the Goldwater-Nichols Department of Defense Reorganization Act. In view of that action, certain technical changes to the law, which are set forth in section 842 are required to adjust to these actions and to reflect organizational changes which have previously taken place within the military departments.

COMPENSATION FOR CRITICAL EMPLOYEES

Witnesses before the committee repeatedly emphasized the increasing disparity in pay between the public and private sectors as a major problem. The National Commission on the Public Service, headed by former Federal Reserve Board Chairman Paul Volcker, recently noted:

> Senior public servants have customarily been willing to moderate their salary expectations—a kind of "public service differential"—in return for challenging work, job security, and

the opportunity to make a difference. However, according to the most recent salary data, the gap between what government and the private sector pays has grown far beyond the point where government can hope to recruit and retain qualified staff, even as the federal benefits package has become less attractive.

The committee recongizes that this problem is not unique to the Department of Defense, and that a permanent solution requires government-wide action. While such a solution is being devised, however, it is essential that the Secretary of Defense be granted a limited authority to pay an appropriate salary differential to the scientists and engineers who provide the government with the ability to manage complex technology issues. Section 843 provides the Secretary with authority to designate 500 science and engineering positions as critical and to provide compensation for such positions at the amount provided for similar positions in the Federally Funded Research and Development Centers, which may not exceed 150 percent of the rate of pay under the applicable federal schedule.

IMPLEMENTATION OF POST-EMPLOYMENT RESTRICTIONS

In developing appropriate "revolving door" limitations, it is necessary to balance the goal of ensuring that public office is not used to further private interests and the goal of promoting a healthy interchange between the public and private sectors, particularly in terms of encouraging people from industry with scientific, technical, and managerial skills to engage in public service.

Because post-employment restrictions have a direct impact on the willingness of highly skilled people to enter public service, applicable statutes and rules must be clearly written and uniformly enforced. Recently, there have been a number of proposals, including the recommendations of President Bush, to revise and consolidate the laws and rules that govern conflicts of interest. The committee intends to participate vigorously in the development of a comprehensive reform proposal.

Because the Department of Defense is subject to unique statutory conflict of interest laws, as well as recently enacted government-wide laws, it is imperative that the Department take action to rationalize the implementation of existing laws, both in terms of internal rules and in terms of the Department's role in fashioning government-wide rules.

Although some implementing guidance has been issued this year, it does not go far enough to harmonize recent legislation with prior statutes, nor has it acted to ensure maximum flexibility in government-wide rules. In order to expedite the Department's implementation of recent laws, the committee has included a provision (sec. 844) that requires issuance of rules to promote consistency in the implementation of revolving door statutes.

LIMITED WAIVER OF THE PENALTY AGAINST FURTHER GOVERNMENT SERVICE BY MILITARY RETIREES

The Deputy Inspector General of the Department of Defense, among others, recommended that Congress "provide greater waiver authority to the DoD for hiring military retirees without penalty." Under current law, military retirees face a substantial reduction—and in many cases, a total forfeiture— of retired pay if they subsequently enter the civil service. This requirement establishes a significant disincentive to continued public service. As the Deputy Inspector General has noted: "It makes little sense to encourage a brain drain from the Government by forcing retired military personnel with badly needed skills to become contractors/consultants instead of civil servants."

Section 845 addresses this problem by authorizing the Secretary of Defense to waive the penalty for up to 1,000 persons filling critical scientific, engineering, professional, and managerial positions. The committee directs the Secretary to report to the Committees on Armed Services of the Senate and House of Representatives not later than September 30, 1990, on the manner in which this authority has been exercised, including a list of the positions held by employees for whom the waiver has been granted.

SCIENTIFIC AND TECHNICAL EDUCATION

The Department of Defense's mission to ensure a strong national defense is based on using superior technology and engineering to counter the quantitative advantage our potential adversary holds in many areas. Consequently, the Department has a special concern for the nation's science and technical education program at all levels and the impact of that program on the Department's ability to carry out its mission in future years.

The committee directs the Department of Defense to examine its own programs, as well as those in other federal agencies, to promote education and training, at all educational levels, in the sciences, engineering and other technical disciplines relevant to the Department's mission.

After such an examination, the Department shall prepare and submit a report to the Senate and House Committees on Armed Services by February 1, 1990, which describes these programs and the process being utilized to evaluate and coordinate them within and among the Services and Defense Agencies and to capitalize on the most successful of them. The report shall include the Department's plan of action and milestones for implementing new programs, expanding existing programs and, as appropriate, developing inter-agency programs.

In addition, in coordination with the Director of the Office of Science and Technology Policy, the Department shall provide its evaluation of the following concepts: (1) a summer internship at Defense laboratories for pre-college teachers of the sciences, engineering, or other technical disciplines; (2) an award program for exceptional pre-college teachers in these disciplines; (3) a scholarship program for undergraduates in scientific or technical education who plan to teach these disciplines at the pre-college level; and (4) expanding the Barry Goldwater Scholarship and Excellence in Education Program or any other such program that the Director and the Department mutually agree to evaluate.

DEPARTMENT OF DEFENSE GRADUATE FELLOWSHIP PROGRAM

The committee believes that the Department of Defense should expand its efforts to encourage the graduate education of more American scientists and engineers to strengthen our nation's capacity to develop the technology essential to our continued security. Section 847 continues the program initiated by Congress last year to provide National Defense Science and Engineering Graduate Fellowships to students pursuing advanced degrees in areas of primary concern to the Department of Defense. The committee directs the Department to closely coordinate its program with the fellowship program of the National Science Foundation. The Department shall award fellowships to the most promising candidates, selected solely on the basis of ability, through a nationwide competitive process. The committee also directs the Secretary of Defense to implement this program in a manner that promotes the award of fellowships to members of groups underrepresented in science and technology, including minorities, women and disabled persons.

TITLE IX—GENERAL PROVISIONS

TRANSFER AUTHORITY

Section 901 permits the transfer of an authorization for obligation for any fiscal year to any other authorization for that fiscal year made available in title I, II, or III upon determination by the Secretary of Defense that such a transfer would be in the national interest. The provision provides the authorization for reprogrammings involving the transfer of authorization between authorizations as set out in bill language.

The authority to transfer could only be used to provide authorization for higher priority items than the items from which authorization was transferred and could not be used to provide authorization for an item that was denied authorization by Congress. The Secretary of Defense would be required to notify the Congress promptly of transfers. The total amount of transfers would be limited to $3 billion.

SAVINGS FROM MANAGEMENT IMPROVEMENTS

The amended defense budget request included anticipated savings of $286.1 million in fiscal 1990 and $433.6 million in fiscal year 1991 from "management improvements." To date, the Defense Department has not identified what specific management improvements are anticipated, nor how the anticipated savings were calculated. The committee recommends a provision (sec. 902) reducing the amounts otherwise authorized in the bill for military personnel and operation and maintenance activities by $286.1 million in fiscal year 1990 and $433.6 million in fiscal year 1991 to achieve the management improvement savings.

LIMITATION ON OBLIGATIONS AND EXPENDITURES

The Congressional Budget Office (CBO) and the Department of Defense have technical differences in their estimates of the outlays likely to result from the amended budget request for the Department of Defense.

Because of these differences, and to ensure that the Secretary of Defense complies with the fiscal year 1990 Budget Summit Agreement between the President and the Congress, the committee recommends a provision (sec. 903) that directs the Secretary of Defense to manage the obligations and expenditures of the Department of Defense during fiscal year 1990 so that defense outlays are in compliance with the Budget Summit Agreement and the Congressional Budget Resolution.

The Secretary shall report regularly to the Committees on Armed Services and Appropriations of the Senate and House of Representatives on the expenditures of the Department of Defense, comparing these outlays to the limitation in section 903; to the monthly estimate of expenditures in the February 1989 CBO Baseline; and to the Department's monthly estimate of obligations and expenditures in support of the April 1989 amended budget request. The Secretary should also explain the steps he is taking to keep the Department of Defense in compliance with the limit on obligations and expenditures.

LIMITATION ON USE OF MERGED ACCOUNT FUNDS

The committee was disturbed to discover that the Air Force was planning to use the so-called "M Account" to fund approximately $944 million in major corrections to the B-1 bomber. Although "M Account" funds may be used to make appropriate adjustments under original contracts (for example, to settle contract disputes in which the commercial claimant prevails) after the period of availability for obligation of funds has ended, the committee does not believe that such funds were ever intended to be available for the purposes or in the amounts contemplated by the Air Force in this instance. The Air Force proposed to use the "M account" funds in a manner totally inconsistent with practice during the past fifteen years.

This episode highlights a serious deficiency in the internal management of lapsed funds. Under previous procedure, the Air Force was able to draw upon lapsing funds with no approval required by the Secretary of Defense. While this may be justified if amounts are relatively small, it is entirely inappropriate for withdrawals of any substantial amount. The Deputy Secretary of Defense, who testified before the Committee on this issue, unequivocally committed the Department of Defense to not use those funds without notifying and obtaining the approval of the Congress. This matter has underscored the importance of establishing a procedure to regulate the use of "M Account" funds.

Section 904 sets forth specific conditions for use of these funds.

REPORT ON CONVENTIONAL ARMS CONTROL VERIFICATION

The committee recommends a provision (sec. 905) directing the President to submit not later than March 1, 1990, a report on the types of measures that would be required to verify effectively the proposal for conventional arms reductions in Europe adopted by NATO on May 30, 1989.

NEGOTIATIONS ON CONVENTIONAL FORCE REDUCTIONS IN EUROPE

The committee welcomes the initiation this year of the negotiations between the member states of NATO and the Warsaw Pact on Conventional Armed Forces in Europe (CFE). Further, the committee supports President Bush's conventional arms reduction proposals announced in Brussels on May 29, 1989, and endorsed by the NATO Heads of State the following day. This initiative extended the original NATO negotiating position, which called for equal aggregate ceilings for tanks, artillery, and armored troop carriers at levels approximately 10-15 percent below current NATO holdings, to include reductions to equal ceilings in three additional categories: combat aircraft, helicopters, and U.S. and Soviet active duty personnel deployed on foreign soil in Europe.

The committee recognizes that the Soviet Union, as well as a number of prominent former U.S. Government officials, have proposed much deeper reductions as a final goal of the CFE negotiations. The committee believes that the military and political implications of reductions to these levels need to be fully understood. Accordingly, it recommends a provision (sec. 906) that directs the President to evaluate the military and political implications for NATO of reductions in the six designated CFE categories of military equipment and personnel to equal ceilings (a) 10-15 percent below; (b) 25 percent below; and (c) 50 percent below current NATO holdings in these categories.

The President's report should include an analysis of the likely force postures; impact on NATO's short-range nuclear force (SNF) requirements; effect on POMCUS and war reserve requirements; implications for U.S.-based reinforcing units, airlift, and sealift; prospective costs and savings; implications for NATO's strategy, doctrine and deterrent policies; effect on conventional stability; and effect on the ability of the United States to meet global military requirements associated with reductions to these three levels. The report shall be submitted to Congress by May 1, 1990.

REPORT ON THE DESIRABILITY OF NEGOTIATIONS WITH THE SOVIET UNION REGARDING LIMITATION ON ANTI-SATELLITE CAPABILITIES

In the statement of managers accompanying the conference report on the Department of Defense Appropriations Act for Fiscal Year 1984, Congress required the Reagan administration to conduct an analysis of whether any agreement to ban or limit anti-satellite (ASAT) capabilities would be in the U.S. National interest. In a March 31, 1984 report, the Reagan administration concluded that an ASAT agreement was not in the U.S. national interest, in part, on the grounds that there were significant difficulties with verification of an ASAT arms control agreement or that such an agreement could not address the full range of threats to our satellites.

The committee notes that the 1984 report relied on national technical means (NTM) as the primary monitoring tool. While the committee does not disagree with maintaining the importance of NTM for monitoring and verifying arms control treaties, recent experience with on-site inspection measures set forth in the INF Treaty, as well as other possible measures, should also be considered.

Accordingly, the committee, while approving in full the administration's request for new, low-altitude ASAT programs, requires the President to conduct a re-examination of the issue of whether a ban or other limitations on some forms of ASAT capability can be monitored and verified and, if so, are in the U.S. national interest.

The provision requires the President to provide to the Committees on Armed Services and Appropriations of the Senate and House of Representatives a comprehensive classified analysis and findings, together with an unclassified summary report, not later than March 15, 1990.

STUDY OF NATIONAL SERVICE

The committee recommends a provision (sec. 908) establishing a Commission to conduct a comprehensive study of national service.

The National Service Commission will be composed of 9 members, 3 appointed by the President and 6 appointed by the congressional leadership.

With this provision, the committee acknowledges the growing interest in a program of national service, including both civilian and military service. A number of bills have been introduced in the Congress, and the President has made service to the country one of his national priorities.

The committee believes that a national service program could have important and far-reaching economic, social and national security benefits. For this reason, section 908 of the committee bill directs the Commission to transmit to the Congress a systematic, thorough and comprehensive study of the desirability, need for, advantages and disadvantages of a national service program by February 15, 1991.

The committee recognizes that government alone cannot solve the social and economic challenges facing our nation today, but instead must enlist private citizens and resources in tackling our nation's common problems. Section 908 instructs the Commission to assess the unmet public needs that could be met through a program of national service.

One of the major areas of interest to the committee is an assessment of the potential benefits, including the direct and indirect cost benefits, of a nationwide program of civilian national service. Although the committee recognizes that there are costs involved in a program of national service, some or even all of these costs could be offset by the immediate and long-term benefits to society from the services provided through such a program.

For example, could an infusion of national service volunteers in the child care delivery system expand the availability and lower the cost of current child care services? What would be the value to society, both in costs avoided and in future productivity, of a cadre of volunteers dedicated to reducing illiteracy? The committee expects this study to address these kinds of cost/benefit questions, taking into account the possible savings to the public and private sectors.

Another major concern of the committee is meeting the future manpower needs of the military services. The study should include an assessment of the future military manpower requirements of the nation, and the feasibility of fulfilling these needs through a national service program which includes educational or other incentives for civilian as well as military service. The appropriate level of compensation and benefits for national service participants should also be a consideration of the Commission.

The committee is aware that there are currently a large number of federal, state and local volunteer service programs, as well as similar programs which are under development. This study is not intended to serve as a substitute for, or alternative to, these ongoing efforts. The committee does believe it would be valuable to have an assessment of the success of these programs, as well as their potential relationship to a more broadly based program of national service. In addition to a review of this country's experience with service programs, the committee believes there is much that could be learned from an examination of other countries' civilian and military national service programs.

A critical element of a thorough study of national service is a projection of the effects of the program on its participants. The committee expects this study to examine the needs of America's youth and the ways in which a program of national service, particularly a program which includes educational or other benefits, could address those needs.

Finally, the study should include the Commission's objective assessment of whether a national service program should be established in the United States. If the Commission concludes such a program is needed, the Commission should make recommendations for implementation of a comprehensive national service program, including a program emcompassing service in the active and reserve components of the armed forces and in full-time (i.e., 1–2 years) or part-time community service. These recommendations should include, but should not be limited to, how such a program should be administered; how costs should be allocated among federal, state and local governments; and what kinds of services could be performed.

Under the provision recommended by the committee, the appointments of the members of the Commission must be made no later than 60 days after enactment of this bill. In carrying out this study, the Commission is given specific authority to use detailed staff and to seek such information as the Commission considers necessary from any federal department or agency. The committee also encourages the Commission to work closely with state, local and private agencies in carrying out this study and preparing its report.

Section 908 requires the Commission to complete the study by February 15, 1991, and requires the President to provide his comments on the study to the Congress within 90 days after publication of the Commission's report.

EXTENSION OF AUTHORITY FOR NATO AWACS

Section 103 of the Department of Defense Authorization Act for Fiscal Year 1982 authorized the Secretary of Defense to waive reimbursement for certain costs incurred in the NATO Airborne Warning and Control System (AWACS) program. The authority has been periodically extended since fiscal year 1982 and is now due to expire at the end of the current fiscal year.

The committee recommends a provision that extends the waiver authority through fiscal year 1991. The provision also includes within the authority a reference to a 1984 agreement on the operations and support of the NATO AWACS force.

EXCHANGE OF COMMUNICATIONS SUPPORT

Section 2401a of title 10, United States Code, authorizes the Secretary of Defense to enter into bilateral agreements with U.S. allies or agreements with NATO for the equivalent exchange of communications supplies and services. This authority has enabled the United States and its allies to maximize the use of their communications equipment.

The administration has proposed several changes to section 2401a that would broaden its applicability and improve its administration. The committee recommends a provision that incorporates these changes.

The first change would authorize the Secretary of Defense to enter into multilateral communications exchange agreements with allied countries and organizations other than NATO. Second, the obligations that participants in an exchange arrangement incur to one another would have to be liquidated at the end of the arrangement (but at least once every five years) instead of annually. This change to section 2401a would ease the administration of communications exchange agreements by recognizing that they often span a few years. Finally, the allied countries with which the United States could cooperate in these arrangements would be expanded to include any allied countries designated by the Secretary of Defense with the concurrence of the Secretary of State.

MODERNIZATION OF NATO'S SOUTHERN FLANK

In an effort to assist the military modernization of NATO's southern flank, the committee adopted a provision in the National Defense Authoriziation Act for Fiscal Year 1987 which granted the President the authority to transfer excess defense equipment, at no cost, to those member nations of NATO's southern flank which are eligible for U.S. security assistance and are integrated into NATO's military structure. It was the committee's intent that equipment be transferred which was dated by U.S. standards, but which could still make a military contribution to the defense of NATO's southern flank. In 1987, this authority was extended in the Department of Defense Appropriations Act for Fiscal Year 1988 to include major non-NATO allies on the southern and southeastern flank of NATO. The committee understands that, at the present time, this provision authorizes the transfer of equipment to Israel, Egypt, Greece, Portugal, and Turkey.

The committee believes that this authority to transfer excess defense equipment has provided an important and cost-effective method for strengthening key NATO allies that would otherwise be unable to afford costly defense equipment. However, the authority expires at the end of fiscal year 1989; therefore, the committee has included a provision to extend through fiscal year 1994 the existing authority to transfer excess defense equipment for the modernization of the defense capabilities of countries on NATO's southern and southeastern flank.

EXCHANGE TRAINING

Section 544 of the Foreign Assistance Act of 1961 (22 U.S.C. 2347c) authorizes foreign military personnel to attend without charge professional military education institutions in the United States (other than Service academies). However, their attendance must be based upon an agreement for the one-for-one exchange of students between those U.S. institutions and comparable foreign institutions.

The U.S. Army Russian Institute in Garmisch-Partenkirchen, West Germany conducts a two-year, advanced level education program in Soviet and East European affairs for U.S. military officers and officials from other agencies of the U.S. government. The Russian Institute would like to enter into an exchange agreement with the Royal Military College of Science in Great Britain. The agreement would provide that one U.S. military officer could attend a British program in signals intelligence, without charge, in return for the attendance of one British officer, without charge, at the U.S. Army Russian Institute.

The committee believes that this reciprocal arrangement would serve the interests of both the United States and Great Britain. However, because of the unique location of the Russian Institute outside the United States in West Germany, it is unable to use the authority granted by section 544. Therefore, the committee recommends a provision that would make the U.S. Army Russian Institute eligible to participate in the exchange training arrangements authorized by section 544.

PAYMENT OF CERTAIN EXPENSES FOR BILATERAL AND REGIONAL COOPERATION PROGRAMS

Section 1051 of title 10, United States Code, authorizes the Secretary of Defense to pay the travel expenses of military personnel of developing countries who attend bilateral or regional defense meetings with U.S. military personnel. Since section 1051 was enacted into law in 1986, the unified combatant commanders have found its authority very helpful in encouraging closer cooperation between their forces and those of developing countries within their areas of responsibility.

Because section 1051 expires at the end of the current fiscal year, the committee recommends a provision that permanently extends its authority. In addition, the provision would authorize travel expenses to be paid for meetings held in Canada and Mexico, which are not located in the area of responsibility of any unified combatant command. This change is necessary because section 1051 currently specifies that the expenses of military personnel of developing countries may be paid only for meetings within the area of responsibility of the unified combatant command in which their country is located. The committee expects that any meetings conducted in Canada and Mexico for which travel expenses are paid will be directly relevant to the defense needs of the developing countries which send participants.

ADMISSION OF TEMPORARY WORKERS FOR COOPERATIVE RESEARCH, DEVELOPMENT, OR COPRODUCTION PROJECTS

For several years, the committee has encouraged the Department of Defense to cooperate with our allies in the research, development, and production of common defense equipment. As part of this broad effort, the Defense Department has entered into many agreements with our allies in which U.S. and foreign companies pool their finances, technical knowledge, and personnel.

To carry out some of these collaborative projects, the participating companies have agreed to establish a joint headquarters, research, or production facility in the United States. The committee understands that the employees of foreign companies who work at these facilities in the U.S. have experienced serious problems in meeting U.S. immigration requirements. In particular, under the terms of the visa category in which these foreign employees are likely to enter the United States (the so-called "H-1" category found in 8 U.S.C. 1101(a)(15)(H)(i)), they are able to remain in this country for a maximum of six years. However, many defense research projects, especially those requiring the coordination of two or more countries, take much longer than six years to conclude. Therefore, foreign employees working on these cooperative projects in the U.S. cannot remain in this country for the duration of their projects. As a result, the continuity of research is disrupted as foreign employees come and go.

To remedy this problem, the committee recommends a provision that authorizes those people coming temporarily to the United States to work on cooperative research, development, or coproduction projects to remain in the United States for the duration of their projects. However, people entering the United States for this purpose may not remain in this country under this new authority for more than 10 years, unless they are then granted annual extensions of one year in length by the Attorney General. The committee intends that these extensions should be granted only if they are necessary to allow an individual to complete a cooperative project that has continued for more than 10 years. These projects must be governed by government-to-government agreements administered by the Department of Defense.

SETTLEMENT OF ADMIRALTY CLAIMS

Section 915 increases the statutory delegation limitation authority for each of the Secretaries of the Military Departments. The present limitation has been in effect since 1965. The increase in costs of both labor and materials over the years now results in submission of more than half of the admiralty claims to the Secretaries themselves. This increase in delegation authority from $10,000 to $100,000 will speed up the processing of most claims for and against the government. It will also be consistent with the statutory pattern for other classes of claims.

PUBLICATION OF HISTORY OF THE OFFICE OF THE SECRETARY OF DEFENSE

Section 916 authorizes the Government Printing Office (GPO), on behalf of the Secretary of Defense, to contract with university presses for the printing, publishing, and sale of the next two volumes of the *History of the Office of the Secretary of Defense.*

Although government documents normally are printed and disseminated through the GPO, the Office of the Historian of the Department of Defense has requested authority to print its next two volumes through university presses. The historian has noted that university presses, due to their unique expertise, could provide benefits not available when the printing is done by GPO, such as design assistance, independent peer review, editing of manuscripts, and marketing of the materials. It is the intent of the committee that the selection will be made through competition among university presses, using evaluation criteria that give primary weight to qualitative factors.

CONGRESSIONAL OVERSIGHT OF SPECIAL ACCESS PROGRAMS

The Department of Defense's management and oversight of special access programs have shown significant improvement during the last two years. The committee has welcomed the Department's decision to make public additional information on the F-117A fighter aircraft and the B-2 bomber. The committee believes these are positive steps, and urges the Department of Defense to develop a coordinated plan for the release of information on other special access programs.

While the committee agrees with the Department's decision to release to the public information on the stealth fighter and bomber programs, it is concerned that public announcements on these types of highly sensitive programs be carefully coordinated with all appropriate parties before an announcement is released. The committee recognizes that classification authority for these programs resides in the Department of Defense; however, due to the procedures used by the Department and the Congress to establish, fund, and manage highly classified special access programs, Congress maintains a clear role and responsibility in how information regarding these programs is released. The Congress, in funding special access programs in a classified manner, is responding to DoD requirements. By funding those programs in this manner, Congress expects DoD to work closely with the Congress with respect to classification decisions.

The Department of Defense Appropriations Act for Fiscal Year 1988 and the National Defense Authorization Act for Fiscal Years 1988 and 1989 both included provisions on congressional oversight of special access programs. In general, these provisions dealt with information concerning special access programs to be provided to the Senate and House Armed Services and Appropriations Committees, and the requirement to notify these committees when new special access programs were initiated. These provisions have been useful to the committees as they performed their Congressional oversight responsibilities.

Difficulties have emerged, however, in procedures used to publicly disclose previously classified special access information. In particular, the committee believes the plan for initial release of information concerning the F-117A was not adequately coordinated, especially with our allies. In addition, the initial proposed timing of the first release was perceived to have political motivations. Similar problems arose with respect to certain information and activities relative to the B-2. The committee is also concerned that the information to be released is consistent, and that all appropriate participants in special access programs be given adequate opportunity to review and comment on the planned disclosure.

Accordingly, the committee directs the Secretary of Defense to report to the Committees on Armed Services and Appropriations of the Senate and the House of Representatives whenever a change is planned in the classification of a Special Access program of the Department of Defense, or when classified information is to be made public concerning a Special Access program. The report, which shall be provided to the Committees not later than 14 days before the date on which the change or public announcement is to occur, shall include a description of the change, the reason for the change, and any planned public announcement related to the change. If the Secretary determines that such a change or public announcement must be made prior to the expiration of that 14 day period because of exceptional circumstances, the Secretary shall submit the report before the change or public announcement occurs, and shall include in such report the basis for the timing of the change or public announcement.

The committee considered recommending a statutory provision on this matter, but determined that the foregoing procedures would suffice in view of the typically cooperative approach the Department has taken with the committee in the special access area. Should the Department not follow these procedures, however, the Committee will reconsider the question of legislating on this subject.

The committee does not intend that the requirements should inhibit in any way efforts to reduce the amount of information under special access security controls. In fact, the committee reiterates its longstanding belief that each special access program should have a plan that is known to Congress for the appropriate transition from special access to lower levels of classification, including unclassified. The intent of these procedures is to assure that the appropriate committees are able to exercise oversight of special access programs not only when they are initiated, but also when they are opened for public disclosure.

REPORT ON UNILATERAL SOVIET WITHDRAWALS FROM EASTERN EUROPE

On December 7, 1988, General Secretary Mikhail Gorbachev announced in a speech before the United Nations that the Soviet military would unilaterally withdraw troops and equipment from Eastern Europe and Soviet territory west of the Urals. Specifically, Mr. Gorbachev announced that the Soviet Union was:

—reducing its overall armed forces strength by 500,000 personnel;

—removing six tank divisions from the GDR (East Germany), Czechoslovakia, and Hungary, and "disbanding" them;

—reducing Soviet forces stationed in these countries by 50,000 men and their armaments by 5,000 tanks;

—withdrawing assualt landing troops and several other formations and units, including assualt crossing units, with their weapons and combat equipment stationed in these countries;

—reducing the overall numerical strength of the Soviet armed forces and the number of armaments stationed in the European part of the USSR and in the territories of its allies by 10,000 tanks, 8,500 artillery systems, and 800 combat aircraft; and,

—reorganizing remaining Soviet divisions in the terrotories of its allies to become "clearly defensive."

The committee welcomes this announcement and recognizes that it is an important step to reducing Soviet forces toward parity with

NATO. The committee also recognizes, however, that remaining Soviet forces still pose a substantial threat to Western Europe and encourages the Soviet Union to make additional unilateral cuts and to continue serious negotiations within the Conventional Armed Forces in Europe (CFE) talks, maintaining the objective of reducing forces in Europe to equal levels for both sides.

In order to understand the magnitude of these announced unilateral withdrawals, the committee directs the Secretary of Defense, in conjunction with the Director of Central Intelligence, to submit to the Committees on Armed Services of the Senate and House of Representatives a status report on the unilateral Soviet withdrawals. The report shall be submitted in unclassified and classified form, no later than March 1, 1990. The report shall include:

(a) an overview of unilateral Soviet withdrawals and a status report of what types of equipment have been removed and the disposition of the equipment after it was removed from its deployment area;

(b) an assessment of whether any new equipment has been deployed in the European part of the Soviet Union and in any Warsaw Pact countries that is of the weapon type subject to unilateral withdrawal;

(c) an assessment of the troop reductions including the number of officers and enlisted men that have been disbanded and their current disposition;

(d) an assessment of Soviet attempts to reorganize their forces in a more defensive posture; and

(e) an assessment of the overall impact of these reductions on NATO military effectiveness in the event that Western Europe was attacked under a surprise attack scenario and during a crisis scenario.

MARINE CORPS ARMOR AND ANTI-ARMOR CAPABILITIES

The committee is concerned the Marine Corps may be getting too heavy and directs the Marine Corps to study its armor and anti-armor capabilities and requirements. The study shall focus on assessing the proper balance between posture for full spectrum conflict and requirements for deployability, mobility and sustainability. To the greatest degree possible, it shall utilize data developed in similar studies by the Army.

This report shall be submitted to the Senate and House Committees on Armed Services and Appropriations not later than six months after enactment of this legislation.

SPECIAL OPERATIONS CAPABILITIES

In the past several years, the Congress has acted to institutionalize a small, tightly focused and specially dedicated joint capability for special operations, but the experience of history demonstrates that regular combat forces must have the training and flexibility to support, as necessary and/or appropriate, special operations and low intensity conflict. Each service has unique capabilities which provide essential support and can expand considerably the range of options for operations and for support of specialized capabilities.

The services are encouraged to work with the U.S. Special Operations Command in identifying training assistance for the development of their unique contributions to the nation's total capability to engage in special operations and low intensity conflict.

TITLE X—PANAMA CANAL COMMISSION

The purpose of this title is to authorize expenditures from the Panama Canal Revolving Fund for the operation and maintenance of the Panama Canal. Appropriated funds are not utilized to operate and maintain the Panama Canal; it operates on a self-sustaining basis. Only toll monies and other revenues paid by users of the Panama Canal are authorized to be expended, as well as borrowing authority already authorized by law.

Under existing law, however, an authorization of obligations and expenditures by the Panama Canal Commission is required, even though an appropriation of funds is no longer required.

The committee has reviewed the Panama Canal Commission's detailed justification of programs and estimates for the upcoming fiscal year and is aware of the planned toll increase which should increase toll revenues by approximately $32 million. The committee also notes with approval that virtually all of the payments due to the Government of Panama pursuant to the Panama Canal Treaty have been placed in escrow as a result of President Regan's action in April 1988, taken at the request of the legitimate representatives of the Government of Panama and to foster constitutional democratic government in Panama.

DIVISION B—MILITARY CONSTRUCTION AUTHORIZATIONS

The purpose of Division B is to provide military construction authorization and related authority to support of the military departments during fiscal years 1990 and 1991. The administration's request is reflected in S. 1083 as introduced by request. This division as approved by the Committee on Armed Services totals $8,022,261,000 in authorization for appropriations in fiscal year 1990 and $5,349,806,000 in fiscal year 1991.

These authorizations provide construction in support of the military services, Guard and Reserve components, defense agencies, NATO Infrastructure, and military family housing requirements.

A brief summary of the fiscal year 1990 authorization follows:

	Revised FY1990 Request	Senate	
		Change to Request	Senate Authorized
Summary:			
Total Military Construction Army	737,100	(4,486)	732,614
Total Military Construction Navy	1,133,200	4,399	1,137,599
Total Military Construction Air Force	1,385,490	(120,555)	1,264,935
Total Mil Construction Defense Agencies	596,200	(24,000)	572,200
Total Mil Construction, Army Natl Guard	114,000	60,609	174,609
Total Mil Construction Air National Guard	164,600	51,580	216,180
Total Army Reserve Military Construction	76,900	14,555	91,455
Total Navy Reserve Military Construction	50,900		50,900
Total Air Force Reserve Mil Construction	46,200		46,200
NATO Infrastructure	501,900	(39,600)	462,300
Total Military Construction	4,806,490	(57,498)	4,748,992
Total Family Housing Army	1,438,200	(5,600)	1,432,600
Total Family Housing Navy	752,200	(9,836)	742,364
Total Family Housing Air Force	1,015,900	56,905	1,072,805
Total Family Housing Defense Agencies	21,300	(900)	20,400
Total Homeowner's Assistance	5,100		5,100
Total Family Housing	3,232,700	40,569	3,273,269
Total Military Construction/Family Housing	8,039,190	(16,929)	8,022,261
Component Totals:			
Army	2,180,400	(10,086)	2,170,314
Navy	1,885,400	(5,437)	1,879,963
Air Force	2,401,390	(63,650)	2,337,740
Defense Agencies	617,500	(24,900)	592,600
NATO	501,900	(39,600)	462,300
Guard and Reserve	452,600	126,744	579,344
Total Military Construction/Family Housing	8,039,190	(16,929)	8,022,261

BACKGROUND

In addressing the Department of Defense military construction request for fiscal years 1990 and 1991, the Readiness, Sustainability, and Support Subcommittee held 7 hearings.

In addition to receiving testimony from representatives of the major unified commands and the Joint Logistics Commanders, the subcommittee also heard from the commissioners and staff of the Defense Secretary's Commission on Base Closures and Realignments, the General Accounting Office, the Office of the Secretary of Defense, the military services, the Congressional Budget Office, and the General Services Administration. The topics of the deliberations included:

—Readiness and sustainability implications of the DoD budget request;
—Current condition and modernization needs of the Department's facility infrastructure;
—Rationale and justification behind the Base Closure Commission's recommendations;
—Defense Department environmental restoration efforts; and
—Proposed transfer of the Pentagon Reservation from the General Services Administration to the DoD, and associated issues of private sector financing of administrative and other facilities.

In reviewing the military construction request, the committee tried to take into account several important factors:

—The age of the defense facility base and the severe shortage of maintenance and repair funds.
—The inadequate investment rate in replacement facilities and support systems.
—The impact of the Base Closure Commission recommendations.
—The problems of securing enhanced host nation support from countries such as Japan and Korea.
—The unsettled U.S. force structure and associated force beddown in Eruope in light of ongoing conventional force reduction negotiations.

COMMITTEE ACTION, FISCAL YEAR 1990

The committee authorized the Defense Department's military construction program at very near the requested funding level. There is a significant shift of funding from overseas projects and associated currency adjustments to high priority projects in the United States.

The committee made the following adjustments to the Department's fiscal year 1990 military construction request:

State	Installation	Project	Revised FY1990 Request	------Senate------- Change to Request	Senate Authorized
		MILITARY CONSTRUCTION CHANGES:			
		----------- Army --------------			
DISTRICT OF COLUMBIA	WALTER REED AMC	Parking Structure		11,000	11,000
GEORGIA	FORT BENNING	Barracks Revitalization		2,000	2,000
GEORGIA	FORT BENNING	Childcare Centers		2,646	2,646
ILLINOIS	MEL PRICE SUPPORT CENTER	Alter Dormitory		3,750	3,750
INDIANA	FORT BENJAMIN HARRISON	Wastewater Treatment Facility		359	359
KENTUCKY	FORT KNOX	Physical Fitness Training Center		5,419	5,419
KENTUCKY	FORT KNOX	M1 Tank Driver Training Facility		6,500	6,500
SOUTH CAROLINA	FT. JACKSON	Consolidated Field Maintenance Facility		23,000	23,000
TEXAS	FORT SAM HOUSTON	Medical Systems Equipment Training Complex		3,550	3,550
CONUS CLASSIFIED	CLASSIFIED LOCATIONS	Classified Project		3,400	3,400
CONUS CLASSIFIED	CLASSIFIED LOCATIONS	Land Acquisition		600	600
CONUS CLASSIFIED	CLASSIFIED LOCATIONS	Operational Facility		7,500	7,500
GERMANY	AUGSBURG	Electrical Power System Upgrade	600	(600)	
GERMANY	BAUMHOLDER	Vehicle Maintenance Sheds	6,400	(6,400)	
GERMANY	HANAU	Hardstand	1,750	(1,750)	
GERMANY	HEILBRONN	Hardstand & Wash Facility	5,400	(5,400)	
GERMANY	MANNHEIM	Vehicle Maintenance Sheds	8,000	(8,000)	
KOREA	CAMP CASEY	Barracks	21,000	(21,000)	
KOREA	CAMP CASEY	Tactical Equipment Shop	3,200	(3,200)	
KOREA	CAMP GARY OWEN	Barracks	2,450	(2,450)	
KOREA	CAMP GARY OWEN	Tactical Equipment Shop	1,750	(1,750)	
KOREA	CAMP HOVEY	SOF-Spl Opns Aircraft Maintenance Hangar	8,200	(8,200)	
KOREA	CAMP HOVEY	Tactical Equipment Shop	7,100	(7,100)	
OVERSEAS VARIOUS	VARIOUS LOCATIONS	Currency Adjustment		(6,360)	(6,360)
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	74,420	(2,000)	72,420

		Total Army		(4,486)	

State	Installation	Project	Revised FY1990 Request	Senate	
				Change to Request	Senate Authorized
		Navy			
GEORGIA	ALBANY MARINE CORPS LOGISTICS BASE	Calibration Laboratory		3,250	3,250
GEORGIA	KINGS BAY NAVAL SUBMARINE BASE	Community Impact Assistance	3,770	7,779	11,549
INDIANA	CRANE NAVAL WEAPONS SUPPORT CENTER	Battery Test Facility		4,000	4,000
MISSOURI	KANSAS CITY MC SUPPORT ACTIVITY	Finance & Data Processing Center, Phase I		10,000	10,000
NORTH CAROLINA	CAMP LEJEUNE MARINE CORPS BASE	Operations Center		7,000	7,000
NORTH CAROLINA	CHERRY POINT MARINE CORPS AIR STATION	Bachelor Enlisted Quarters	13,070	(13,070)	
NORTH CAROLINA	NEW RIVER MARINE CORPS AIR STATION	Physical Fitness Center		2,450	2,450
PENNSYLVANIA	PHILADELPHIA NAVAL SHIPYARD	Hazardous & Flammable Storehouse		10,000	10,000
SOUTH CAROLINA	NAVAL WEAPONS STATION CHARLESTON	Alternate Access Road		4,600	4,600
WASHINGTON	KEYPORT NAVAL UNDERSEA WARFARE ENGR STA	Undersea Warfare Engineering Center		10,000	10,000
JAPAN	ATSUGI NAVAL AIR FACILITY	Maintenance Hangar	14,900	(14,900)	
JAPAN	OKINAWA CAMP BUTLER MARINE CORPS BASE	Combined Arms Staff Trainer Facility	3,200	(3,200)	
JAPAN	OKINAWA FUTENMA MARINE CORPS AIR STA	Maintenance Hangar Addition	1,950	(1,950)	
JAPAN	OKINAWA FUTENMA MARINE CORPS AIR STA	Tactical Support Van Pads	5,500	(5,500)	
UNITED KINGDOM	LONDON NAVAL ACTIVITIES	Automotive Vehicle Maintenance Shop	730	(730)	
UNITED KINGDOM	LONDON NAVAL ACTIVITIES	Bachelor Enlisted Quarters And Mess Hall	9,400	(9,400)	
OVERSEAS VARIOUS	VARIOUS LOCATIONS	Currency Adjustment		(5,930)	(5,930)
		Total Navy		4,399	

State	Installation	Project	Revised FY1990 Request	------Senate------- Change to Request	Senate Authorized
		--------- Air Force -------------			
ALASKA	EIELSON AFB	Supply Complex		10,000	10,000
ARIZONA	DAVIS-MONTHAN AFB	Traffic Management Complex Facility		4,000	4,000
CALIFORNIA	EDWARDS AFB	Corrosion Control Facility		6,500	6,500
CALIFORNIA	MCCLELLAN AFB	Childcare Center		1,200	1,200
COLORADO	PETERSON AFB	Space Operations Training Facility		12,200	12,200
COLORADO	PETERSON AFB	Supply Warehouse		4,000	4,000
DISTRICT OF COLUMBIA	BOLLING AIR FORCE BASE	National Capital Music Center	5,900	(5,900)	
FLORIDA	MACDILL AFB	Wing Operations		3,050	3,050
GEORGIA	ROBINS AFB	Hangar		14,400	14,400
GEORGIA	ROBINS AFB	Add/Alter Childcare Center		1,100	1,100
IDAHO	MOUNTAIN HOME AFB	F111-Add To And Alter Squadron Ops Fac	720	(720)	
IDAHO	MOUNTAIN HOME AFB	F111-Alter Corrosion Control Facility	1,900	(1,900)	
IDAHO	MOUNTAIN HOME AFB	F111-Alter Fuel System Maintenance Dock	1,300	(1,300)	
ILLINOIS	SCOTT AFB	Dormitory		8,400	8,400
INDIANA	GRISSOM AFB	Wing Headquarters		2,150	2,150
LOUISIANA	ENGLAND AFB	Base Supply Complex		4,100	4,100
LOUISIANA	ENGLAND AFB	Flightline Fence & Lights		300	300
LOUISIANA	ENGLAND AFB	Alter Dormitories		3,200	3,200
MICHIGAN	K.I. SAWYER AFB	Fitness Center		4,300	4,300
MISSOURI	WHITEMAN AFB	B2-Unspecified Reduction	--	(50,000)	(50,000)
NEW YORK	GRIFFISS AFB	SAC Rebasing-Add/Alt Integrated Maint Fac	2,350	(2,350)	
NEW YORK	GRIFFISS AFB	SAC Rebasing-Hydrant Fueling System	7,400	(7,400)	
NEW YORK	GRIFFISS AFB	SAC Rebasing-Munitions Storage Igloos	2,200	(2,200)	
OHIO	NEWARK AFB	Childcare Center		680	680
OHIO	WRIGHT-PATTERSON AFB	Lab Fuel Storage Facility		5,500	5,500
OHIO	WRIGHT-PATTERSON AFB	Childcare Center		1,950	1,950
OHIO	WRIGHT-PATTERSON AFB	Add/Alter Optical Systems Lab		3,700	3,700
OKLAHOMA	TINKER AFB	B2-Avionics Facility/Land Acquisition	9,600	(9,600)	
OKLAHOMA	TINKER AFB	B2-Integration Support Facility	17,000	(17,000)	
OKLAHOMA	TINKER AFB	B2-Secure Storage Facility	5,200	(5,200)	
OKLAHOMA	TINKER AFB	Childcare Center		1,550	1,550
SOUTH DAKOTA	ELLSWORTH AFB	Middle School		7,250	7,250
TEXAS	KELLY AFB	Childcare Center		730	730

State	Installation	Project	Revised FY1990 Request	------Senate------- Change to Request	Senate Authorized
UTAH	HILL AFB	Missile Maintenance Shop		2,350	2,350
UTAH	HILL AFB	Childcare Center		1,300	1,300
WASHINGTON	FAIRCHILD AFB	Survival Training Dormitory		10,000	10,000
WASHINGTON	FAIRCHILD AFB	Command Post		2,700	2,700
GERMANY	HAHN AB	Upgrade Water Storage & Dist System	3,800	(3,800)	
GERMANY	HAHN AB	Vehicle Maintenance Facility	3,200	(3,200)	
GERMANY	RAMSTEIN AB	Add To And Alter NCO Academy (Kapaun)	2,500	(2,500)	
GERMANY	RAMSTEIN AB	Add To And Alter Vehicle Maint Facility	2,800	(2,800)	
GERMANY	RHEIN-MAIN AB	Refueling Vehicle Shelter	280	(280)	
GERMANY	SEMBACH AB	Security Police Operations Facility	1,800	(1,800)	
GERMANY	SPANGDAHLEM AB	Add To And Alter Water Storage/Dist Sys	4,700	(4,700)	
ICELAND	KEFLAVIK	CW Protection-Avionics Facility	8,900	(8,900)	
ITALY	AVIANO AB	Transient Dormitory	3,800	(3,800)	
ITALY	CROTONE	Base Theater	1,950	(1,950)	
ITALY	CROTONE	Morale/Welfare/Recreation Supply	450	(450)	
ITALY	CROTONE	Multi-Purpose Sports Fields	1,250	(1,250)	
ITALY	CROTONE	Range Facilities	7,000	(7,000)	
ITALY	CROTONE	Recreation Center/Library	3,500	(3,500)	
ITALY	CROTONE	Youth Center	1,250	(1,250)	
JAPAN	KADENA AB	KC135-Add To And Alter Flight Sim Tng Fac	2,300	(2,300)	
JAPAN	KADENA AB	KC135-Fire Protection Maintenance Facs	2,000	(2,000)	
JAPAN	MISAWA AB	Protective Construction	3,700	(3,700)	
JAPAN	YOKOTA AB	Jet Fuel Storage	4,700	(4,700)	
KOREA	KUNSAN AB	Aircraft Fuel Systems Repair Dock	3,000	(3,000)	
KOREA	KUNSAN AB	Alter Munitions Storage Facility	3,200	(3,200)	
KOREA	KUNSAN AB	Avionics Facility	4,700	(4,700)	
KOREA	KUNSAN AB	ECM Pod Shop And Storage Facility	1,400	(1,400)	
KOREA	KUNSAN AB	War Readiness Materiel Veh Storage Fac	840	(840)	
KOREA	OSAN AB	Aircraft Parts Distribution Facility	3,000	(3,000)	
KOREA	OSAN AB	Alter Avionics Facility	510	(510)	
KOREA	OSAN AB	Chapel Center	2,600	(2,600)	
KOREA	OSAN AB	F16-Add To Engine Inspection & Repair Fac	800	(800)	
KOREA	OSAN AB	Security Police Operations Facility	2,400	(2,400)	
KOREA	OSAN AB	War Readiness Materiel Veh Storage Fac	840	(840)	

State	Installation	Project	Revised FY1990 Request	------Senate------- Change to Request	Senate Authorized
PHILIPPINES	CLARK AB	Add To And Alter Passenger Terminal	4,050	(4,050)	
PHILIPPINES	CLARK AB	Munitions Operational Complex-Phase I	2,400	(2,400)	
PORTUGAL	LAJES FIELD	Transient Dormitory		2,300	2,300
SPAIN	ZARAGOZA AB	Aerospace Support Equipment Shop	1,950	(1,950)	
TURKEY	ANKARA	Combat Readiness Center	4,200	(4,200)	
TURKEY	INCIRLIK AB	CW Protection-Avionics Facility	3,850	(3,850)	
TURKEY	INCIRLIK AB	Water Distribution Mains	960	(960)	
UNITED KINGDOM	HIGH WYCOMBE	Dormitory	4,100	(4,100)	
UNITED KINGDOM	RAF ALCONBURY	Add To And Alter Physical Fitness Center	2,900	(2,900)	
UNITED KINGDOM	RAF BENTWATERS	Central Post Office	1,100	(1,100)	
UNITED KINGDOM	RAF BENTWATERS	Chapel	1,400	(1,400)	
UNITED KINGDOM	RAF BENTWATERS	Youth Center	1,850	(1,850)	
UNITED KINGDOM	RAF FAIRFORD	Jet Fuel Storage/Hydrant Refueling Sys	6,900	(6,900)	
UNITED KINGDOM	RAF FAIRFORD	Upgrade Water Storage And Dist System	2,700	(2,700)	
UNITED KINGDOM	RAF LAKENHEATH	Storm Drainage Disposal	860	(860)	
UNITED KINGDOM	RAF MILDENHALL	Jet Fuel Storage	3,400	(3,400)	
UNITED KINGDOM	RAF UPPER HEYFORD	Combat Readiness Center	7,840	(7,840)	
UNITED KINGDOM	RAF UPPER HEYFORD	CW Protection-Squadron Operations Fac	2,050	(2,050)	
UNITED KINGDOM	RAF UPPER HEYFORD	F111-Add To And Alter Flight Sim Fac	2,200	(2,200)	
UNITED KINGDOM	RAF UPPER HEYFORD	F111-Add To Avionics Maintenance Shop	3,350	(3,350)	
UNITED KINGDOM	RAF UPPER HEYFORD	F111-Add To Engine Shop	3,380	(3,380)	
OVERSEAS VARIOUS	VARIOUS LOCATIONS	Currency Adjustment		(8,635)	(8,635)
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Unspecified Minor Construction	7,000	17,350	24,350
		Total Air Force		(120,555)	

State	Installation	Project	Revised FY1990 Request	------Senate------ Change to Request	Senate Authorized
		--------- Defense Agencies --------------			
CALIFORNIA	DEFENSE LANGUAGE INST - MONTEREY	Academic Auditorium	6,100	(6,100)	
CALIFORNIA	DEFENSE LANGUAGE INST - MONTEREY	General Instructional Facility Ph III	10,600	(10,600)	
OVERSEAS VARIOUS	VARIOUS LOCATIONS	Currency Adjustment		(7,300)	(7,300)
		Total Defense Agencies		(24,000)	
		-------- Army National Guard -----------			
ALABAMA	ALICEVILLE	Armory		709	709
COLORADO	DURANGO	Armory		906	906
COLORADO	MONTROSE	Armory		1,698	1,698
FLORIDA	ST. AUGUSTINE	Armory		2,500	2,500
ILLINOIS	URBANA	Armory		865	865
ILLINOIS	DECATUR	Armory		2,660	2,660
ILLINOIS	DECATUR	Organizational Maintenance Shop		460	460
ILLINOIS	WILLIAMSON COUNTY	Armory		2,152	2,152
ILLINOIS	WILLIAMSON COUNTY	Organizational Maintenance Shop		440	440
MICHIGAN	CAMP GRAYLING	Range, MPRC Phase I	14,483	(7,483)	7,000
MICHIGAN	CAMP GRAYLING	Waste Water Treatment Facility		3,283	3,283
MICHIGAN	MENOMINEE COUNTY	Armory		1,167	1,167
MICHIGAN	BERRIEN COUNTY	Armory		1,206	1,206
MICHIGAN	SHIAWASSEE COUNTY	Armory		1,406	1,406
MISSISSIPPI	CAMP SHELBY	Bachelor Officer Quarters		700	700
MISSISSIPPI	CAMP SHELBY	M-16 Firing Range		300	300
MISSISSIPPI	CAMP SHELBY	Alter Engineering Building		400	400
NEBRASKA	LINCOLN	Combined Support Maintenance Shop		3,438	3,438
NEBRASKA	LINCOLN	Add to Aircraft Parking Ramp		597	597
NEW MEXICO	BELEN	Armory		1,350	1,350
NEW MEXICO	CLOVIS	Armory		1,603	1,603
NEW MEXICO	CLOVIS	Organizational Maintenance Shop		714	714
NEW MEXICO	FARMINGTON	Armory		1,163	1,163
NEW MEXICO	SANTE FE	Warehouse		905	905
NEW MEXICO	SANTA FE	Maintenance Shop		3,092	3,092
NEW MEXICO	SPRINGER	Organizational Maintenance Shop		714	714

State	Installation	Project	Revised FY1990 Request	------Senate------	
				Change to Request	Senate Authorized
OKLAHOMA	CAMP GRUBER	Trng Site, Bks/Ms Util Ph III	3,752	(3,752)	
OKLAHOMA	CAMP GRUBER	Trng Site, Tng Fac Ph IV		3,820	3,820
OREGON	MEDFORD	Armory Addition		820	820
OREGON	PORTLAND	Add/Alter Armory		1,400	1,400
SOUTH CAROLINA	LEXINGTON	Armory		2,400	2,400
SOUTH CAROLINA	EASTOVER	Armory		1,500	1,500
TENNESSEE	BROWNSVILLE	Armory		992	992
TENNESSEE	HUMBOLT	Armory		1,453	1,453
TENNESSEE	JACKSON	Aviation Support Facility		1,636	1,636
TENNESSEE	CLINTON	Armory		1,160	1,160
VIRGINIA	ARLINGTON HALL STATION	National Guard Center, Phase III		11,000	11,000
WEST VIRGINIA	WHEELING	Aviation Support Facility/Armory		5,326	5,326
WEST VIRGINIA	BUCKHANNON	U.S. Property & Fiscal Office		1,500	1,500
WYOMING	CHEYENNE	Armory Annex		2,351	2,351
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	4,800	2,058	6,858
		Total Army National Guard		60,609	
		------- Air National Guard ---------			
ALABAMA	MARTIN ANGB	Base Supply		900	900
ALABAMA	MARTIN ANGB	Equipment Warehouse		2,100	2,100
ARIZONA	FT. HUACHUCA	Composite Deployment Support Facility		2,350	2,350
IOWA	SIOUX GATEWAY AIRPORT	Land Acquisition		550	550
IOWA	SIOUX GATEWAY AIRPORT	Base Supply Warehouse		2,550	2,550
IOWA	SIOUX GATEWAY AIRPORT	Add to ECM Shop		390	390
KANSAS	MCCONNELL AFB	Land Acquisition		5,200	5,200
KANSAS	MCCONNELL AFB	Operation & Training Facility		3,700	3,700
MASSACHUSETTS	OTIS ANGB	Fuel Distribution System		5,200	5,200
OREGON	PORTLAND IAP	Add/Alter Taxiway		6,000	6,000
TENNESSEE	MEMPHIS	Add/Alter Aircraft Hangar		4,900	4,900
TENNESSEE	MEMPHIS	Aircraft Apron/Fuel Storage & Distribution		11,800	11,800
WISCONSIN	TRUAX FIELD	Alter Weapons Security Facility		990	990
WISCONSIN	TRUAX FIELD	Alter Vehicle Maintenance Shop		950	950
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	6,450	4,000	10,450
		Total Air National Guard		51,580	

State	Installation	Project	Revised FY1990 Request	Senate: Change to Request	Senate: Senate Authorized
		---------- Army Reserve --------------			
NEW MEXICO	SANTA FE	Army Reserve Center		2,955	2,955
WEST VIRGINIA	BECKLEY	Army Reserve Center		3,200	3,200
WEST VIRGINIA	KINGWOOD	Army Reserve Center		1,400	1,400
WEST VIRGINIA	ELKINS	Army Reserve Center		1,400	1,400
WEST VIRGINIA	MORGANTOWN	Army Reserve Center		1,900	1,900
WEST VIRGINIA	RAINELLE	Army Reserve Center		2,200	2,200
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	5,388	1,500	6,888
		Total Army Reserve		14,555	
WORLDWIDE UNSPECIFIED	OSD MILCON	NATO Infrastructure	501,900	(39,600)	462,300

State	Installation	Project	Revised FY1990 Request	------Senate------- Change to Request	Senate Authorized
		FAMILY HOUSING CHANGES:			
		----------- Army -------------			
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Maintenance Of Real Property-Army	562,120	(5,600)	556,520
		---------- Navy --------------			
ILLINOIS	GLENVIEW NAS	New Construction (140)		15,300	15,300
ICELAND	NAVAL AIR STATION KEFLAVIK	New Construction (112)	23,213	(300)	22,913
PHILIPPINES	NAVY PUBLIC WORKS CENTER SUBIC BAY	New Construction (216)	19,000	(19,000)	
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Construction Improvements	41,748	13,700	55,448
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Leasing	41,488	(688)	40,800
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Maintenance Of Real Property	301,148	(18,848)	282,300
		Total Navy Family Housing		(9,836)	
		---------- Air Force -------------			
GERMANY	RAMSTEIN AB	New Construction (200)	20,660	(1,938)	18,722
PHILIPPINES	CLARK AB	New Construction (450)	35,427	(35,427)	
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Construction Improvements	173,349	77,062	250,411
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Leasing	101,592	(5,592)	96,000
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Maintenance Of Real Property	309,349	10,000	319,349
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Utilities Account	236,970	12,800	249,770
		Total Air Force Family Housing		56,905	
		-------- Defense Agencies ------------			
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Currency Adjustment Defense Agencies		(900)	(900)

COMMITTEE ACTION, FISCAL YEAR 1991

The committee authorized for appropriation approximately 58 percent of the Defense Department's request of $9,266,150,000 for fiscal year 1991. Following procedures last used during the biennial budget request of fiscal years 1988 and 1989, the committee authorized most lump sum authorizations such as planning and design, minor construction, and family housing operations and maintenance.

Because of the early state of design of many projects requested in fiscal year 1991 and questions about the overall affordability of the Department's request, most specific new construction requests were deferred. The Committee did authorize just over $900 million in projects which were phases of previously agreed upon multi-year initiatives, as well as projects which support authorized new missions.

A summary of the fiscal year 1991 authorization is as follows:

FISCAL YEAR 1991 MILITARY CONSTRUCTION AUTHORIZATION ($M)

SVC	CATEGORY	REQUEST	AUTHORIZATION
ARMY			
	Minor Construction	12.0	12.0
	Planning & Design	96.53	96.53
	Family Housing Operations	1,558.75	1,558.75
	Homeowners Assistance	5.1	5.1
ARMY NATIONAL GUARD		119.5	119.5
ARMY RESERVE		61.9	61.9
NAVY			
	Minor Construction	15.5	15.5
	Planning & Design	81.999	81.999
	Family Housing Operations	674.9	674.9
NAVY/MARINE CORPS RESERVE		53.3	53.3
AIR FORCE			
	Minor Construction	12.0	12.0
	Planning & Design	114.756	114.756
	Family Housing Operations	835.000	835.000
AIR NATIONAL GUARD		107.2	107.2
AIR FORCE RESERVE		38.5	38.5
DEFENSE AGENCIES			
	Minor Construction	14.2	14.2
	Contingency Construction	10.0	10.0
	Planning & Design	94.4	94.4
	Conforming Storage	15.0	15.0
	Family Housing Operations	21.3	21.3
	NATO Infrastructure	503.6	503.6
TOTAL INDIVIDUAL PROJECTS			904.371
TOTAL AUTHORIZED			5,349.806

FISCAL YEAR 1991 MILCON PROJECT AUTHORIZATION ($M)

ARMY

ST	BASE	PROJECT	REQUEST	AUTHORIZATION
AL	Anniston AD	Ammo Demil Facility	34.3	34.3
AR	Pine Bluff Arsenal	Ammo Demil Facility	17.1	17.1
OR	Umatilla Depot	Ammo Demil Facility	45.5	45.5
TX	Red River Army Depot	Depot Replacement	39.0	39.0

NAVY

ST	BASE	PROJECT	REQUEST	AUTHORIZATION
AZ	Yuma MCAS	AV-8B Beddown	3.0	3.0
CA	San Diego	NAVHOSP, Parking	1.5	1.5
	Twenty-nine Palms	AV-8B Beddown	3.6	3.6
FL	Orlando, NTC	Barracks Mess Hall	10.9 7.0	10.9 7.0
GA	Kings Bay NSB	Trident Support Complex	69.1	75.231 1/
NY	New York, NS	Family Housing (150 units)	19.6	19.6
NC	Camp Lejeune, MCB	Mechanics Training Building	3.0	3.0
	Cherry Point, MCAS	Aircraft Bombing Range	1.0	1.0
TX	Lackland,AFB	NTTCDET - Bachelor Enlisted Quarters	11.8	11.8
VA	Dam Neck	Marine Environ. Systems Fac. Operations and Maintenance Facilities	8.0	8.0
	Little Creek	NAB, Landing Craft Air Cushion Complex (Incr II)	12.4	12.4

1/ Increase in community impact assistance.

WA	Everett, NS	Carrier Support Complex	22.15	22.15
GUAM				
	FSSC	Electronic Installation (ROTHR)	30.0	30.0
ICELAND				
	Keflavik NAS	Fuel Facilities	1.0	1.0
	Keflavik NAS	Family Housing (112 units)	27.2	27.2
		AIR FORCE		
AK	Shewya AB	Multi-Year Modernization	51.5	51.5
CO	Falcon AFB	MILSTAR Terminal	2.0	2.0
	Peterson AFB	MILSTAR Terminal	1.55	1.55
OK	Altus AFB	C-17 Beddown	7.9	7.9
SC	Charleston AFB	C-17 Beddown	8.74	8.74
TN	Arnold AFB	Large Rocket Test Fac. Ph.III	66.3	66.3
TX	Lackland AFB	Multiyear Modernization	22.5	22.5
WY	F.E.Warren AFB	Peacekeeper Rail Mobile	6.45	6.45
	Overseas Classified	F-15E Beddown, Ph. II	5.91	5.91
GERMANY				
	Hahn AB	TR-1 Gnd Station	7.2	7.2
PHILIPPINES				
	Clark AB	F-15E Beddown, Ph. II	5.19	5.19
		DOD AGENCIES		
NV	Nellis AFB	SDI Test Facility	5.35	5.35
TX	Ft.Sam Houston	Brooke AMC, Ph. II	84.0	84.0

VA	Pentagon Bldg. Complex	Pent.Heat Plant	63.0	63.0
	"	Concourse	13.3	13.3
	Portsmouth Naval Hosp.	Replacement, Ph. II	176.0	176.0
PUERTO RICO				
	Ft. Buchanan	Jr. & Sr. H.S. Adds.	4.2	4.2
TOTAL:				904.371

OVERSEAS MILITARY CONSTRUCTION

The committee made substantial reductions in Department of Defense requests for military construction in overseas areas. In the case of requests for construction in Japan and Korea, the committee believes that these projects should be funded by the host nations. Despite congressional recommendations that the Department of Defense negotiate more inclusive host nation funding criteria, there has been no evidence that these criteria have been broadened in any substantial way. It is the committee's view that U.S. funded facility modernization in these countries be limited to those projects which are essential for safety or in support of new missions which are located in these nations at the initiative of the United States.

The Committee deferred most construction requests within the Philippines. In light of the scheduled negotiations with the Government of the Philippines regarding the future tenure of U.S. forces in that country, the committee does not believe it prudent to continue substantial investments in the modernization of facilities at military bases supporting American forces until our long term access to these installations is assured.

As part of this action, the committee deferred the construction of military family housing at both Subic Bay Naval Base and Clark Air Base. The Committee is sensitive to the hardships and hazards facing the families of American service personnel living in the communities surrounding these installations. In light of the current security problems and other health and welfare difficulties, the committee believes that the Department of Defense ought to explore ways to reduce the presence of military families in the Philippines until the long term presence of U.S. forces is assured and family support facilities can be constructed.

The committee deferred substantial amounts of construction requested for bases in Europe. Projects supporting new missions, command and control, and quality of life were generally funded, while modernization projects were deferred. In light of ongoing conventional force reduction negotiations and the Bush Administration's proposal to reduce U.S. forces by 10 percent, the committee believes that continued modernization of bases in Europe ought to be delayed until a long term force structure has been determined and a rebasing of these forces has been developed.

COMMUNITY SUPPORT CENTER AT MARINE CORPS AIR STATION, TUSTIN

The committee recommends a provision (sec. 2206) that would amend the Military Construction Authorization Act for Fiscal Year 1989 for family housing construction at Tustin Marine Corps Air Station, California. The authorization of $1.46 million in that act for the construction of a mobile home park would be amended to permit the same amount of funds to be used, instead, to construct a community support center within the installation's family housing complex.

FAMILY HOUSING AT MARINE CORPS AIR STATION, TUSTIN

The committee recommends a provision, (sec. 2207) that would authorize the Secretary of the Navy to accept and use the proceeds from a pending litigation settlement with the Rossmoor Liquidating Trust resulting from the sale of contested real property interests. These proceeds would be used for the purpose of constructing up to 150 units of family housing at Marine Corps Air Station, Tustin.

FORT SILL, OKLAHOMA, HOSPITAL REPLACEMENT

The committee recommends a provision (sec. 2407) that would amend the National Defense Authorization Act for fiscal year 1989 with regard to the authorization of construction of a replacement facility for Reynolds Army Hospital, Fort Sill, Oklahoma. In that bill, a new hospital was authorized for $54 million, with the first $27 million of construction authorized for appropriation during fiscal year 1989. The administration requested funding for the second phase of construction, $27 million, in fiscal year 1990. The second increment is supported in this bill.

The Defense Medical Facility Office has advised the committee that the overall project, as currently designed, cannot be constructed within the approved project authority. While the design is being revised to achieve some economies, it appears that additional project authority is required. For this reason, the committee recommends that the original project authority of $54 million be amended to $68 million. After the Defense Department has achieved whatever economies can be realized through redesign or other means, it is expected to pursue additional funds through either reprogramming or a third increment of construction in fiscal year 1991.

DEFENSE FUEL SUPPORT POINT, CHARLESTON, SOUTH CAROLINA

The committee recommends a provision (sec. 2408) that would extend the authorization originally approved in fiscal year 1987 for a Defense Fuel Support Point, Charleston, South Carolina. Due to environmental complications, this project has not been executed and its authority has lapsed. Because the Inspector General of the Defense Department has raised concerns about this project, the committee directs the Defense Logistics Agency to provide the committee a report of the resolution of these findings no later than 21 days prior to the award of a construction contract.

RENTAL GUARANTEE HOUSING PROGRAM

The committee recommends a provision (sec. 2801) that would modify the existing rental guarantee program in three ways to make these proposals more attractive to military personnel and contractors, and to provide the government more direct control over the housing projects' maintenance standards and costs. Specifically the provision will:

Permit the military services to provide utilities and services to the same extent they are provided to other family housing assets located on government land.

Permit, but not direct, default of the contractor under certain conditions. This flexibility is expected to reduce private financing costs.

Permit the Department of Defense or a separate contractor to perform maintenance and management functions.

The committee intends that these contracting options will be used to provide suitable housing opportunities for military families at the lowest cost, while also providing maximum protection to the government. In establishing the maximum initial rental rates in accordance with section 2821(b)(2) of Title 10 United States Code, the government will take into account not only the rental costs paid directly to the property owner, but also those expenses of utilities, maintenance, and management which may be paid by the government.

FAMILIY HOUSING LEASING

The committee recommends a provision (sec. 2802) that would provide three changes to the current authority for the Department of Defense to enter into longer term leases of family housing:

The maximum annual rental of domestic leases is raised from $10,000 to $12,000, with the exception of 500 domestic leases in high cost areas which will have a ceiling of $14,000.

The current ceiling of $20,000 annual rent for overseas leases will be indexed to account for inflation and foreign currency exchange fluctuations.

The overall number of overseas family housing leases is increased from 38,000 to 53,500. This change will allow the Army to fully implement its Government Rental Housing Program (GRHP) in Europe.

The committee expects the Army to accommodate the additional lease costs for the GRHP through transfers to funds from the military personnel account.

LONG TERM FACILITIES CONTRACTS

The committee recommends a provision (sec. 2803) that would extend for two years the existing authority for the Department of Defense to enter into long term facility leases for certain specified activities and services. The committee hopes that this additional time will permit the Department to enter into a number of such leases where there is a priority need and where such a leasing arrangement is most advantageous to the government. It would also expand the number of such projects that each military service could enter into under this test authority.

FAMILY HOUSING IMPROVEMENTS FOR THE HANDICAPPED

The committee recommends a provision (sec. 2804) that would waive the current $40,000 limit on the renovation of military family quarters for up to three units per year for each military department. Improvements up to $100,000 may be expended when necessary to accommodate the needs of current or anticipated handicapped residents.

DOMESTIC BUILD-TO-LEASE PROGRAM

The committee recommends a provision (sec. 2805) that would extend the authority of the current build-to-lease program, generally known as section 801, for two years, until September 30, 1991. In addition, this section provides an additional 3,500 units to the current authorization ceiling: 2,000 for the Department of the Navy and 1,500 for the Department of the Air Force.

TURN-KEY SELECTION PROCEDURES

The committee recommends a provision (sec. 2806) that would extend for one year, until September 30, 1991, the authority of the Department of Defense to enter into turn-key construction contracts. These contracts select a contractor on the basis of price and other evaluation criteria to perform, under a firm-fixed-price contract, both the design and construction of a facility. The provision also provides this authority to heads of defense agencies, as well as the Secretaries of the military departments.

The committee supports efforts to pursue turn-key construction contracts when they appear to be most advantageous to the government. However, since very few projects have as yet been awarded under this authority, it believes that making this a permanent authority is premature. The committee requests that the Department provide the Congress, no later than February 1, 1990, a report on the experience which it has had with these contracting arrangements as of December 31, 1989. This report should address the number of projects under contract, obstacles to broader application, and the results of these contracts relative to project cost and construction quality.

COST VARIATION AUTHORITY

The committee recommends a provision (sec. 2807) that would simplify the accounting and criteria under which the Department of Defense may accommodate increases in the costs of construction projects which exceed the authorized value.

CONSTRUCTION THROUGH NATO GOVERNMENTS

The committee recommends a provision (sec. 2808) that would exempt certain mandatory contract clauses from agreements between the U.S. and NATO governments for military construction and family housing construction. It extends to intergovernmental construction agreements the same contracting procedures already authorized for logistical support, supplies, and services.

UNSPECIFIED MINOR CONSTRUCTION

The committee recommends a provision (sec. 2809) that would increase the threshold for unspecified minor construction from $1 million to $1.5 million, and the threshold for unspecified minor construction using operations and maintenance funds from $200,000, to $300,000. Both of these adjustments are made to take account of the effects of inflation since the previous thresholds were established in 1982.

The committee believes that these adjustments will provide the Department of Defense additional flexibility in meeting unforeseen construction requirements with funds authorized for unspecified minor construction. The committee supports the current Department policy of programming the majority of foreseeable construction projects, even those within the minor construction funding threshold, through the normal budgeting process. It does not anticipate approving substantially larger authorizations for unspecified minor construction.

LEASE-PURCHASE OF FACILITIES

The committee recommends a provision (sec. 2810) that would provide a general authority to the Department of Defense to enter into long term lease agreements which would provide the Department an equity interest in the property at the end of the lease period.

The committee is concerned about the significant lease costs which the Department incurs each year to provide administrative and other facilities to its activities. The significant costs of administrative space in the National Capital Region and other areas, such as Army research activities at Redstone Arsenal, Air Force development activities at Wright Patteson Air Force Base, and the Marine Corps Finance Center, Kansas City, make them excellent exampes of needed modernization which might be performed cost effectively under this provision.

The committee hopes that the authority to enter into lease-purchase agreements, coupled with the creative use of government land, will provide an alternative to military construction which can drive down annual facility costs and provide the Department a long term equity interest in modern, efficient facilities.

HOMEOWNERS ASSISTANCE PROGRAM

The committee recommends a provision (sec. 2811) that would provide the Secretary of Defense the authority to transfer funds from any other available defense appropriation to the Homeowners Assistance Fund. This fund is used to assist employees who are forced to move as a consequence of base closures and who find that they must sell their homes in real estate markets which have been adversely affected by the closure decision. The fund is also available to finance appropriate impact studies to fully assess the local economic reprecussions of closures.

LAND CONVEYANCE, PITTSBURGH, PENNSYLVANIA

The committee recommends a provision (sec. 2821) that would authorize the Secretary of the Navy to sell through competitive procedures approximately 1.29 acres comprising a Naval Reserve and Marine Corps Reserve Center, Pittsburgh, Pennsylvania. The Secretary is authorized to apply the proceeds to the sale, not to be less than fair market value, towards the construction of a new Navy and Marine Corps Reserve Center in the greater Pittsburgh area.

AMENDMENT TO KAPALAMA LAND SALE AND REPLACEMENT AUTHORITY

The committee recommends a provision (sec. 2822) that would amend a land conveyance authority provided in section 2332 of the National Defense Authorization Act for Fiscal Years 1988 and 1989 by establishing the State of Hawaii as the prospective purchaser. The property is still to be sold at fair market value. This change will permit the State to acquire the property directly and avoid the costly process of acquisition by condemnation after a competitive sale.

LAND CONVEYANCE, FORT KNOX, KENTUCKY

The committee recommends a provision (sec. 2823) that would authorize the competitive sale of a tract of approximately 12 acres on Fort Knox, Kentucky, together with improvements. The isolated location of this property and its single family housing unit make this land only marginally useful to the installation. The proceeds of the sale would be used to construct up to four family housing units elsewhere on Fort Knox.

SALE OF LAND, GREAT LAKES, ILLINOIS

The committee recommends a provision (sec. 2824) that would authorize the Secretary of the Navy to sell through competitive procedures a tract of approximately 14 acres, with improvements, located at the Navy Public Works Center, Great Lakes, Illinois. Because of the isolated location of the 18 family housing units on the site relative to major military installations and the valuable potential commercial use of this property, the Navy is authorized to construct with the proceeds of the sale up to 35 family housing units at Naval Air Station, Glenview, Illinois, where there is a housing deficit of about 500 units.

ARMY PROPERTY INTEREST, BENTON, WASHINGTON

The committee recommends a provision (sec. 2825) that would authorize the Army to amend a deed for approximately 22 acres of land owned by the Port of Benton, Washington, but subject to a reversionary interest by the Department of the Army should the property not be developed as an industrial facility.

Since the property has not been developed as an industrial site during the 25 years of Port ownership, the Port proposes to donate this property to Washington State University for educational purposes. The provision would authorize the amendment of the deed to retain the Army's reversionary interest in the property should it not be used for educational purposes.

LAND CONVENYANCE, NAVAL RESERVE CENTER, KEARNEY, NEW JERSEY

The committee recommends a provision (sec. 2826) that would authorize the Secretary of the Navy to convey to Hudson County, New Jersey, approximately 2.9 acres of land comprising a portion of the Naval Reserve Center, Kearney, New Jersey. In consideration of at least fair market value, the County will demolish two excess Center buildings and improve parking on the remaining Center property, as well as provide additional considerations.

LAND CONVEYANCE, FORT BELVOIR, VIRGINIA

The committee recommends a provision (sec. 2827) that would authorize the Secretary of the Army to convey through competitive procedures, any interest of the United States in all or any portion of the approximately 820 acres comprising the Engineer Proving Ground Fort Belvoir, Virginia. In consideration of at least fair market value for those interests which are conveyed, the grantee shall construct facilities and infrastructure improvements at the Engineer Proving Ground and at any other Army installation.

This authority is a critical element in the development of federal property in the National Capital Regional in order to relocate administrative activities from commercially-leased to government-owned facilities. The committee hopes that the public/private venture envisioned by this authority will provide a maximum return to the taxpayer and substantially reduce the long term costs of supporting important headquarters activities in the Washington area.

FORT GILLEM, GEORGIA, LAND TRANSFER

The committee recommends a provision (sec. 2828) that would authorize the Secretary of the Army to transfer title to approximately 35 acres of land to the State of Georgia for the purpose of developing a new state National Guard headquarters. The land would also be used to site a new armory which was authorized and appropriated in fiscal year 1989.

Relocation of the state National Guard headquarters complex will provide a more modern and secure area which will permit the collocation of headquarters and operational units in the same complex. Additionally, by being adjacent to Fort Gillem, the Guard headquarters will be able to effect more efficient liaison with other active and Army Reserve activities.

LAND CONVEYANCE, HICKAM AIR FORCE BASE, HAWAII

The committee recommends a provision (sec. 2829) that would authorize the Secretary of the Air Force to convey to the State of Hawaii approximately 23 acres of land currently constituting a portion of Hickam Air Force Base, Hawaii. In consideration, the State will provide for or finance the construction of facilities being displaced by this conveyance. In addition, the State will provide or finance the construction of specified additional facilities on the base or in the Honolulu area up to the fair market value of the land to be conveyed.

CONTROL AND OPERATION OF THE PENTAGON RESERVATION

The committee recommends a provision (sec. 2831) that responds to an administration request to transfer control of the Pentagon Reservation from the General Services Administration (GSA) to the Department of Defense. The Pentagon Reservation includes approximately 420 acres upon which are located the Pentagon, the Navy Annex, the Pentagon Heating and Refrigeration Plant, and associated parking and other support.

The principal purposes of this transfer are to provide the Department of Defense the authority to budget for the renovation of these important facilities and to eliminate a layer of management. In anticipation of approval of this transfer, the Department has requested a total of $76.3 million in fiscal year 1991 for the renovation of the Pentagon. This is the first of seven increments of construction, totalling $609.3 million. This total does not include an estimate $160 million required for the lease and/or construction of relocation space needed during the period of construction when Pentagon employees will be displaced.

The committee reluctantly approves the transfer of the Pentagon Reservation from the GSA to the DoD as the only practical way to provide timely funding for the long overdue renovation of the Pentagon. The committee has received testimony from both the Defense Department and the General Services Administration concerning the deteriorated state of this building and the reasons that appropriate maintenance and renovation have not been provided during the more than 40 years in which the General Services Administration and its predecessor agencies have had responsibility for these tasks.

In addition to capitalizing the original construction of the Pentagon, the Department of Defense has, since 1975, paid the GSA for the operation and maintenance of the facilities on the Pentagon Reservation. During the last 14 years, in addition to paying for direct expenses associated with the use of these facilities, the Department of Defense has also contributed approximately $230 million into the Federal Building Fund (FBF) as part of this payment.

The FBF was established to provide capital to construct and renovate facilities under the control of the GSA. It is clear that despite substantial contributions by the DoD associated with the use of these important facilities, the Fund was not used to finance badly needed renovation of the Pentagon or the other facilities on the Pentagon Reservation.

The history of the long term deterioration of the Pentagon is one of unsatisfactory stewardship by both the landlord and the tenant. The result of decades of neglect is an unprogrammed and unfunded requirement over the next decade tentatively estimated to be $769 million. Some of this expense could have been avoided through timely maintenance and modernization.

Under the current arrangement of management and control by the General Services Administration, the cost of renovating the Pentagon and other facilities within the Pentagon Reservation is a liability of that agency. Transferring control of the Pentagon Reservation to the Dpartment of Defense effectively shifts this liability to the DoD. Absent extraordinary measures, the cost of renovation would be met within the DoD budget at the expense of the readiness and sustainability of our fighting forces.

Associated with the transfer of the Pentagon Reservation to the Department of Defense is the provision to the Department of the same civilian police powers within the Reservation as are currently exercised by the General Services Administration.

In order to meet the expense of badly needed renovation without affecting other DoD budget elements, and to insure responsive management of the Pentagon Reservation once it is transferred to the Department of Defense, the committee directs that:

1. Facility management responsibility for the Pentagon Reservation shall be vested with the Department of the Army. It is the committee's view that an existing facility management organization such as the Military District of Washington represents an effective and economic structure to manage the day to day facility operations and maintenance support for the Pentagon Reservation. This approach avoids a costly duplication of these skills within the Office of the Secretary of Defense and an unnecessary expansion of the Washington Headquarters

Service, which has performed limited facility management and liaison functions with the General Services Administration.

2. The cost of this renovation shall be substantially accommodated through a moratorium on contributions to the Federal Building Fund by the Department of Defense associated with the Department's use of GSA facilities in the National Capital Region. This moratorium shall remain in effect until fiscal year 2000, or when funding the Pentagon renovation is completed, whichever occurs first. The committee intends that the savings associated with this moratorium be allocated to the Department's military construction account to finance the renovation of the Pentagon and the lease or construction of space needed to accommodate displaced Pentagon employees during the period of renovation.

COOPERATIVE PARTNERSHIPS FOR LAND MANAGEMENT

The committee recommends a provision (sec. 2832) that would provide the Department of Defense the authority to multiply the impact of federal funds allocated to natural and historic resources management through cooperative agreements with organizations and individuals with appropriate expertise and matching funds. It is anticipated that with such an authority, the Department will be able to replicate highly effective cooperative arrangements currently enjoyed by the United States Forest Service and civic-minded organizations and individuals.

DEVELOPMENT AND LEASE OF LAND AT HENDERSON HALL, VIRGINIA

The committee recommends a provision (sec. 2833) that would provide the Secretary of the Navy the authority to construct an approximately 62,000 square foot administrative building on Henderson Hall, Virginia, and accept reimbursement for such construction from the Navy Mutual Aid Association. In consideration of this sum, the Navy is authorized to provide a no-cost lease to the Association of approximately one third of the square footage of the structure for a period of 50 years.

LAND TRANSFER, SANDIA, NEW MEXICO

The committee recommends a provision (sec. 2834) that would authorize the transfer of approximately 5.5 acres of land at the Sandia National Laboratories, Albuquerque, New Mexico, at no cost, from the Department of Defense to the Department of Energy. Transferring this property will provide the DoE control of the site upon which will be located a Center for National Security and Arms Control. The Department of Energy has requested $1 million dollars in its fiscal year 1990 budget request to construct such a center.

LAKE CHARLES HOMEPORT

The committee recommends a provision (sec. 2835) that would authorize the Secretary of the Navy to reimburse the Lake Charles Harbor and Terminal District for expenses associated with capital improvements to the planned site of the new homeport at Lake

Charles. This initiative was cancelled as part of the Secretary of Defense's decision on base realignments and closures.

The provision would also provide for the no-cost conveyance of approximately 38 acres of land and other improvements back to the District. This land was originally donated to the Navy for the siting of the new homeport.

REUSE OF EXCESS MILITARY BASES

Section 2819 of the National Defense Authorization Act for Fiscal Year 1989 directed the establishment of an interagency commission to screen excess military property in the United States for potential reuse as minimum security prisons or drug rehabilitation centers. This commission was to be established within 30 days of enactment of the bill, with a first report to the Congress by October 1, 1988.

In recent testimony before the committee, a Department of Defense witness stated that as of May 1989, the Commission had not been established and the screening of excess property had not begun. In light of the crisis facing this country from the addiction to and crimes associated with illegal drug use, the committee believes that the formation of this Commission and expeditious screening of excess property for minimum security prisons and drug rehabilitation centers ought to be priority concerns of the administration.

The committee intends to defer the disposal of excess property until the Commission is formed and has made its initial report to Congress.

FORT SHERIDAN

The Defense Secretary's Commission on Base Realignment and Closure recommended that Fort Sheridan, Illinois, be closed. The Commission further recommended that approximately 60 acres of the post be retained as an Army Reserve Center.

While the committee is generally supportive of this initiative, it has concerns regarding the adequacy of the size of the remaining reserve center from the viewpoints of the needs for both administrative space for those post units remaining in the Chicago area and also family housing required by the center and other DoD activities in the area.

There is some indication that by expanding the center to approximately 90 acres, it would retain sufficient administrative and family housing assets to support residual military missions in a cost effective manner. For these reasons, the committee directs that prior to requesting authority to lease commercial administrative space in the Chicago area for units proposed for relocation from Fort Sheridan, the Army shall perform a cost/benefit analysis of retaining administrative facilities on the post for these missions. This study should also address the facility needs of reserve component units currently in leased facilities in the Chicago area to determine if relocating them to existing facilities on Fort Sheridan might be cost advantageous.

Prior to declaring any family housing on Fort Sheridan excess, the committee also directs that the Department of the Army conduct a study of DoD family housing needs in the North Chicago area to determine whether retention of some of the post's family housing stock would be cost effective.

MARINE COPRS BASE, QUANTICO, VIRGINIA

The committee is aware that the missions of the Marine Corps Base, Quantico, have increased and diversified significantly over the last several years with the establishment of the Marine Corps Combat Development Command. This command includes five centers: the Marine Air Ground Task Force Warfighting Center, the Wargaming and Assessment Center, the Intelligence Center, the Air Ground Training and Education Center, and the Information Technology Center. In addition, the Marine Corps Research, Development and Acquisition Command, also at Quantico, has been significantly restructured.

In order to implement and support these new and enhanced missions with functional and efficient facilities, the committee directs that the Secretary of the Navy initiate immediate design of a new research facility and include it in its revised fiscal year 1991 military construction request. The committee also expects that a new facility for the Combat Development Center will be included in the fiscal year 1991 request. The committee directs that the Commandant of the Marine Corps provide the committee, no later than 90 days after enactment of this bill, a report which outlines the long term plans for the development of missions and associated facilities at this important installation.

SECTION 6 SCHOOLS

Section 824 of the Military Construction Authorization Act for Fiscal Year 1986 directed the Department of Defense to provide the Committees on Armed Services of the Senate and the House of Representatives by March 1, 1986, a plan to provide for the orderly transfer of all Section 6 schools to appropriate local school districts. This transfer was to be completed by July 1, 1990.

Since that time, in addtion to the initial report, the Department has conducted a broad analysis of the entire issue of Section 6 school divestiture, and in depth studies of the potential transfer of schools in several states. These studies and associated dialogue with state and local education officials, school staffs, and affected parents, raised a variety of obstacles which have precluded substantial progress in divesting these schools. With rare exception, the parents, staff, and the potential recipient school districts all opposed these transfers. In addition, significant legal and funding problems were identified which would make such transfers extremely difficult to negotiate.

In light of these problems, the Secretary of Defense, on December 30, 1988, notified the committee that the Department was terminating the overall effort to transfer these schools, although individual diverstitures would be pursued as local circumstances warranted.

While the committee believes that the rationale for most Section 6 schools no longer justifies their operation by the Department of Defense, it recognizes that the transfer of these schools is particularly difficult without an assured source of federal impact funds. For this reasons, the committee supports the Secretary's decision to terminate this effort.

Inasmuch as modernization of Section 6 schools has been deferred for the last several years during the period of this evaluation, the committee urges the Department to make a thorough evaluation of the facility needs of these schools and to begin programming improvements for them on a priority basis beginning with the fiscal year 1991 amended budget request.

RESERVE COMPONENT PLANNING AND DESIGN

The committee recommends increases in the planning and design authorization for the Army National Guard, Air National Guard, and Army Reserve. These increases are provided in order to complete the design of the substantial number of construction projects added to the fiscal year 1990 authorization. In addition, these sums are intended to fund the design of several projects which the committee believes ought to be considered for funding in fiscal year 1991. Specific examples of these high priority projects include the development of Camp Ripley, Minnesota, and a number of projects in West Virginia.

NATIONAL GUARD CENTER

During fiscal years 1988 and 1989, the Congress authorized a total of $28 million for a consolidated headquarters building for the National Guard to be constructed at Arlington Hall Station. It has come to the attention of the committee that an additional $11 million will be required to completer the facility. The committee directs, however, that no funds may be made available for a physical fitness facility or a clinic. The committee believes that sufficient athletic facilities exist at the Pentagon, Fort Myer, and the Foreign Service Institute, which is to be located at Arlington Hall Station, to accommodate the National Guard. Also, the Rader Army Clinic at Fort Myer is sufficiently staffed to handle any time sensitive medical needs of the National Guard.

MULTI-PURPOSE RANGE COMPLEX, CAMP GRAYLING, MICHIGAN

The committee is concerned about the potential environmental impact of developing a multi-purpose range complex at the National Guard training site at Camp Grayling, Michigan. While it has recommended an autorization of $7 million for this initiative, this level represents a $7.483 million reduction from the requested amount.

In order to fully appreciate the potential environmental impact of this new activity, as well as mitigating measures which can be employed in the design and operation of the range, the committee directs the National Guard Bureau to submit a report on this matter to the Committees on Armed Services of the Senate and House of Representatives no later than 90 days after enactment of this authorization. The committee intends that funds authorized for this project not be obligated until the committees have had 30 days to review this report.

DIVISION C—OTHER NATIONAL DEFENSE AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

PART A—NATIONAL SECURITY PROGRAMS AUTHORIZATION

NEW PRODUCTION REACTOR

Two years ago, the committee took the first step towards modernizing the nation's aging nuclear weapons complex by directing the Department of Energy to plan for a new production reactor. The committee strongly supports the acquisition of new production reactor capacity, believing that an assured supply of tritium is the highest nuclear material priority in support of the nation's nuclear deterrence forces. In August 1988, the Department of Energy announced a preferred new production reactor acquisition strategy which involves proceeding on an urgent schedule with construction of a heavy water reactor at the Savannah River Plant, which can produce 100 percent of expected tritium requirements, and concurrent preparation leading to the construction of modular high-temperature gas reactors at the Idaho National Engineering Laboratory which can produce 50 percent of expected requirements. As a further contingency, DoE recommended that work continue on light water reactor target development and on solving the institutional issues associated with the acquisition of the WNP-1 plant, a partially completed light water reactor constructed for the Washington Public Supply System.

The urgency of the new production reactor program to the nation's nuclear deterrent has increased with the decision to temporarily cease operations at the K, L, and P reactors at Savannah River, which provide the only currently available supply of tritium.

While the committee agrees that at present the Department of Energy should keep all its new production reactor options open, it is concerned about the ability to afford concurrent construction of two new production reactors at a time of budgetary constraint and contraction. A report by the Congressional Budget Office concludes that the new production reactor program as proposed in August 1988 will likely cost twice DoE's estimate of $6.8 billion. The committee also shares the concern of many witnesses who testified that te proposed new production reactor program may force the Department of Energy and its contractors to stretch too thinly the limited technical talent that exists today for the design, development, and construction of nuclear reactors. The United States has not ordered a new nuclear reactor since 1978.

The administration has requested $303.5 million for the new production reactor program in fiscal year 1990. The committee believes that the now Secretary of Energy needs both to proceed in a timely fashion on acquisition of new production reactor capacity and to evaluate thoroughly all new production reactor options currently under review. The committee recommends authorization of $303.5 million for design, development, and safety reviews for the new production reactor programs. These amounts are available for construction-funded activities for purposes of design and activities which will facilitate the preparation of the Environmental Impact Statement as required by the National Environmental Policy Act. The committee directs the Secretary of Energy to submit a report by March 1, 1990 on the management and budget plan for the new production reactor program, including major program milestones, organizational structure at DoE headquarters and field offices, the safety review process and key decision points for safety reviews, and estimated expenditures and proposed appropriations as contained in the five-year plan.

K REACTOR COOLING TOWER

The committee recommends authorization of $40 million requested for construction of the K Reactor cooling tower project at Savannah River. The Department of Energy must begin construction of this system by early 1990 in order to meet the thermal discharge requirements of the Clean Water Act. Since the K Reactor will be decommissioned when a new production reactor begins operation, and since the environmental damage caused by operation without the cooling tower is minimal and temporary, the committee has been concerned for some time that the funds programmed for this project would be better used to address other higher priority environmental restoration projects. The committee has reluctantly recommended authorization of the cooling tower in order to comply with applicable law, but believes that there should be relief from the requirements that compel construction. The committee intends this report language to be in substantial accord with the language of House Report 101–96 of the House Appropriations Committee on the Energy and Water Development Appropriations Bill for Fiscal Year 1990.

If the K Reactor cooling tower eventually must be built, the committee strongly urges the Department of Energy to investigate all options that would allow the cooling tower to be utilized with the new production reactor at Savannah River.

DEPARTMENT OF ENERGY VERIFICATION RESEARCH

The Department of Energy's Verification and Control Technology (VCT) program conducts advanced research, technology development, and system fabrication for the verification of treaties relating to nuclear weapons and special nuclear materials, and for the support of nuclear-related technical intelligence systems. The program also provides technical and analytical support for the Department of Energy's role in nuclear arms control negotiations and related interagency deliberations. Drawing primarily on the expertise of the Department of Energy national laboratories, this program has been making significant contributions to United States verification technology for over a quarter of a century.

In spite of the increasing scope and accelerating pace of arms control negotiations, the committee notes that the fiscal year 1990 Department of Energy request for the VCT program is $5 million less than the fiscal year 1989 appropriated level of $154.6 million. The committee believes that verification research and technology is an essential element of United States arms control negotiations. The committee therefore recommends authorization of $184.6 million for VCT activities in the Department of Energy, an increase of $35 million over the request.

NUCLEAR DIRECTED ENERGY WEAPONS

The Strategic Defense Initiative (SDI) activities of the Department of Energy are intended to support the research and development of concepts and technologies for nuclear-driven defense systems. The committee observes that there are no plans in the present SDI architectures for the inclusion of any Nuclear Directed Energy Weapons (NDEW). The committee also observes that for the last two fiscal years, the Secretary of Defense has been authorized to transfer up to $100 million of funds appropriated to the Department of Defense for the SDI to the Department of Energy for the nuclear directed energy research program in support of the SDI. In the last two fiscal years, no funds have been transferred.

The administration's budget request included $266 million for NDEW, an increase of $11 million over the amount appropriated in fiscal year 1989. In light of the committee's recommended reductions in Department of Defense activities for the SDI and in light of the very limited objectives of the program as set forth in Section 5.6.4 of the classified 1989 *Report on the Strategic Defense Initiative* by the SDI Organization, the committee recommends approval of $200 million for NDEW by the Department of Energy.

INERTIAL CONFINEMENT FUSION

The objective of the inertial confinement fusion (ICF) program is to achieve a small thermonuclear explosion in the laboratory for the purposes of weapons physics studies, for studies of nuclear weapons effects, and, in the longer term, as a possible energy source. As part of the Department of Defense Authorization Act for Fiscal Year 1985, Congress requested a review of the inertial confinement fusion program, which was prepared by a technical review group convened by the National Academy of Sciences. This report, which was submitted to Congress in March 1986, recommended that the program be funded at about current levels for the next five years in order to determine reliable estimates of cost and specification of the technology. The review group concluded that a firm decision could be made about whether to continue the program vigorously near the end of the five-year period. Accordingly, as part of the National Defense Authorization Act for Fiscal Year 1989, Congress requested a second comprehensive review of the ICF program, including recommendations regarding priorities for future work in the ICF program and an assessment by the Secretary of Energy of the budgetary priority, under current and anticipated budget constraints, that should be given to the ICF program in relation to the core defense research and development programs of the Department of Energy.

The budget request included $168.94 million for the ICF program, which represents a 3 percent inflation-based increase over the fiscal year 1989 appropriation. The committee recommends approval of the budget request of $168.94 million, plus an additional $5 million to be applied as determined by the Secretary of Energy.

SPECIAL ISOTOPE SEPARATION PROJECT

As part of the National Defense Authorization Act for Fiscal Year 1989, Congress prohibited the obligation or expenditure of construction funds for site preparation for the Special Isotope Separation (SIS) project until March 1, 1989. The Secretary of Energy was directed to submit a report to the Committees on Armed Services of the Senate and House of Representatives on the SIS project by that date.

The committee is not convinced that construction of the SIS plant merits the urgent priority it was assigned by the report to Congress on the *Modernization of the Nuclear Weapons Complex* or that is reflected in the budget request of $115 million for construction of this project in fiscal year 1990. According to the Department of Energy, the SIS project is intended to provide the United States with a "contingency source" of new plutonium beginning in the late 1990s. According to testimony provided by the Department of Energy, short-term supplies of plutonium are adequate and "it is impossible to predict accurately at this time whether additional plutonium will or will not be required beyond the year 2000." The priority of the SIS project must be considered in light of the severity of the environmental, safety and health needs throughout the nuclear weapons complex, as well as the need to replace much aging plant and equipment. The committee supports the Department of Energy's decision to conduct an Environmental Impact Statement for the proposed plutonium laser isotope separation experiments to be conducted in the engineering demonstration system at the Lawrence Livermore National Laboratory. This full-scale demonstration system should be fully tested and the plant performance verification series fully completed prior to construction.

The committee recommends authorization of $78.744 million for operating expenses, $1.8 million for general plant projects, $2.5 million for capital equipment, and $40 million for construction-funded design work, associated project management, and site preparation. The committee recommends a provision that (1) prohibits the use of funds in fiscal year 1990 for construction or procurement of long lead materials or equipment; (2) permits the Secretary of Energy to transfer up to $10 million from construction funds to operating expenses for the SIS project should additional funds be needed for technology development at Livermore or for preparation of the Environmental Impact Statement; and (3) requires that no additional construction funds may be obligated until the Secretary of Energy certifies that the SIS technology has been proven and all environmental requirements have been met.

WARHEAD FOR THE FOLLOW-ON TO LANCE MISSILE

In its report on NATO Defense and the INF Treaty, the committee stated:

> The INF Treaty does not require the elimination of the nuclear warhead devices and guidance elements associated with the INF missiles. As a result, the Treaty permits the nuclear warhead devices associated with INF missiles to be modified and redeployed on other weapons.

The W84 and W85 warheads formerly associated with INF missiles are among the newest warheads in the stockpile, incorporating many modern safety features. Accordingly, the committee recommends a provision that would limit the obligation of funds for the design and development of a warhead for the Follow-on To Lance (FOTL) missile to a warhead design which the Nuclear Weapons Council certifies is a cost-effective utilization of the W84 and/or W85 warheads or their components, unless the Nuclear Weapons Council certifies that the W84 and W85 warheads and their components are incompatible with the FOTL missile.

PART C—TECHNOLOGY TRANSFER

Technological advancement is a key component in the growth of the U.S. industrial economy, and a strong industrial base is also an essential element of U.S. national security. Studies sponsored by industry and academia report convincing evidence of declining U.S. competitiveness in both domestic and international markets, despite America's lead in technology innovation. Yet the defense programs national laboratories of the Department of Energy constitute a multi-discipline capability in general science, energy science, and defense related technology development with incomparable research and computer facilities and research and support staffs of demonstrated international expertise.

An opportunity exists to use those resources residing in the defense programs national laboratory facilities to promote technology commercialization while, at the same time, enhancing their primary national security mission. The United States needs to improve commercial sector utilization of federal R&D resources to increase our appreciation of industry's technology requirements and to forge new linkages so that technology flows in two directions: from the labs to industry and from industry to the labs. This cross-fertilization will increase the laboratories' exposure to external technology, which can actually accelerate innovation and increase efficiencies within the defense programs national laboratory facilities themselves.

While the defense programs national laboratories have demonstrated success in technology transfer into the private sector, the effectiveness of this effort can be significantly enhanced if: (a) industry is made more aware of the defense programs national laboratory research and development capabilities and activities; (b) commercialization of technologies developed in connection with the defense programs national laboratories' research, experimental, and developmental activities, through technology transfer, is established as a complementary element of the mission of defense programs national laboratories; (c) the defense programs national laboratories are made more aware of industry market requirements; and (d) industry becomes more involved with activities of defense programs national laboratories at an early enough time in the research and development process to provide guidance on the development of commercially viable products. All of this can be accomplished while nuclear weapons design, development, production, and maintenance still remain the primary mission of the Department of Energy nuclear weapons complex.

The committee recommends an amendment to section 7261a of title 42, United States Code, which accomplishes these objectives in two ways. First, it establishes a framework for the defense programs national laboratories to enter into cooperative research and development agreements with universities, industry, and other third parties. Second, it clarifies and streamlines the transfer of certain rights in inventions and computer software which are developed by laboratories or pursuant to these research and development agreements. And third, it establishes technology transfer as a specified mission of the defense programs complex of the Department of Energy. In all events, the provision is designed so that the enhancement of the laboratories' technology transfer mission is complementary to and supportive of the laboratories' national security mission.

Finally, the purpose of the statutory language is to set a minimum standard of technology transfer and commercialization activity for the Department of Energy and the defense programs national laboratories, and not to discourage even more initiative in this area. Some commentators believe that, at least historically, the Department of Energy has not complied with Executive Order Number 12,591 (April 10, 1987) with respect to the defense programs national laboratories, even though the Executive Order does not, by its terms, contemplate an exception to the Executive Order for weapons laboratories. Executive Order 12,591 requires the Secretary of Energy to "grant to all contractors, regardless of size, the title to patents made in whole or in part with Federal funds, in exchange for royalty-free use by or on behalf of the government." Therefore, the provision should be construed liberally; where there is a reasonable question as to whether the language is intended to allow or mandate either the grant of intellectual property rights to the defense programs national laboratories or other action by the laboratories which would enhance technology transfer or commercialization, the question should be answered in the affirmative.

PART D—MISCELLANEOUS PROVISIONS

PRODUCTION OF THE 155-MILLIMETER ARTILLERY-FIRED, ATOMIC PROJECTILE

The committee believes that the safety and security of our nation's nuclear warheads should not be constrained by the availability of funds. Thus the committee recommends a provision that would exclude from the limitations contained in section 1635 of the Department of Defense Authorization Act for Fiscal Year 1985 amounts spent exclusively to ensure the safety and security of the warheads. The committee also recommends a provision that directs the Secretaries of Energy and Defense to report jointly to the Committees on Armed Services of the Senate and House of Representatives on the implementation and status of this provision.

SPECIAL PERSONNEL MANAGEMENT AUTHORITY RELATING TO CERTAIN DEPARTMENT OF ENERGY POSITIONS

The Department of Energy faces a management crisis. The Rocky Flats plutonium facility is under investigation for alleged illegal storage of nuclear waste and potential operation of nuclear facilities without required permits. The Savannah River reactors have been shut for almost a year. In addition, DoE has been unable to resolve the issues associated with opening its first nuclear waste repository. Nothing short of a significant infusion of new managers will suffice. This critical need cannot be filled simply with administrative generalists.

Management of the facilities that produce nuclear weapons and nuclear materials demands highly-skilled and well-trained individuals in such fields as nuclear engineering, nuclear physics, and hazardous and radioactive waste management. Relatively few individuals have had experience in applying these skills to the problems of nuclear weapons. Most of this talent is employed by the national laboratories, such as Lawrence Livermore or Los Alamos, that are operated for the Department of Energy on a non-profit basis. These individuals have unique skills and experience in nuclear weapons design and nuclear materials production. The Department of Energy needs to be able to tap such talent for federal service. At present, federal pay caps and personnel laws, which treat employees of these non-profit laboratories the same as employees of profit-making firms, have stymied the attempts of the Department of Energy to hire qualified candidates to fill its critical management positions. The Secretary of Energy has stated that under current law, "I can't hire the best in nuclear weapons to come in to help me on nuclear weapons."

To recruit qualified candidates from the national laboratories for critical positions managing the nation's defense nuclear facilities, DoE needs to be able to compensate these individuals in a manner comparable to that of the national laboratories. Salaries at the laboratories, while not unlimited, considerably exceed the amounts that the Government is permitted to pay its highest-level federal employees. Without statutory relief, the Department of Energy will be uanble to hire the individuals capable of revitalizing the nuclear weapons complex.

The other important factor in recruiting qualified candidates from the national laboratories is their ability to return to the laboratories after federal service. The unique federal nature of the nuclear weapons program means this profession cannot be pursued elsewhere. Despite the functional near-identity between service in a national laboratory and federal service, senior national laboratory personnel remain employees of the nonprofit operators. Under current law, employees returning to a national laboratory after a period of federal service in a senior DoE position are subject to the same post-employment restrictions as individuals employed by private contractors. This result occurs because the post-employment restrictions applicable to former federal employees are determined by the former employee's subsequent participation in "particular matters" in which the former federal employee participated during his federal service. Under current law, the long-term contracts under which the national laboratories are operated for DoE are considered to be a single "particular matter" for purposes of post-employment restrictions. (A typical contractual arrangement between the government and a private contractor would be limited to a discrete program.) Thus, under current law, the former federal employee is prohibited from returning to the national laboratory and working on the "particular matter," which, as currently interpreted, covers the full range of activities the laboratories perform for DoE.

Accordingly, the committee recommends a provision which would allow the Secretary of Energy to designate 25 critical positions at the Department of Energy where such positions involve research, development, production, or processing of nuclear materials, facilities, or technology for defense purposes. The maximum rate of pay for these critical positions would not exceed 150 percent of the rate of pay that would otherwise apply to this position and, in no event, would the rate of pay exceed an amount equal to 150 percent of the rate of pay applicable for Executive Level II under the Executive Schedule.

For purposes of the criminal conflict of interest and revolving door laws, employees of Department of Energy national laboratories would not be prohibited from returning to a senior laboratory position after working in a critical position at the Department of Energy. This exception would apply only to employees of DoE laboratories which are operated on a government-owned, contractor-operated (GOCO) basis.

This provision also authorizes the Secretary of Energy to waive the penalty to which military retirees are currently subject should they enter civil service for up to 250 persons filling critical scientific, engineering, and managerial positions. Under current law, military retirees face a substantial reduction, and in many cases, a total forfeiture, of retired pay if they subsequently enter the civil service. This creates a significant disincentive to continued public service for military retirees, many of whom possess unique capabilities in the nuclear area.

NUCLEAR TEST BAN READINESS PROGRAM

The National Defense Authorization Act for Fiscal Year 1989 contained a provision (sec. 1436) requiring the Secretary of Energy to establish a nuclear test ban readiness program. The committee notes its continued support for the nuclear test ban readiness program. However, during the floor debate in the House of Representatives on the conference report on the National Defense Authorization Act for Fiscal Year 1989, an interpretation of this provision was advanced that is inconsistent with the committee's interpretation of the provision as to the objectives and scope of the program. The committee believes it is necessary to clarify its understanding of last year's provision.

Accordingly, the committee adopts a provision making several clarifying amendments in section 1436 of the National Defense Authorization Act for Fiscal Year 1989. The Secretaries of Defense and Energy shall jointly establish and support a program to assure that the United States retains the capability to maintain the reliability, safety, and military effectiveness of the nuclear stockpile in the event that further restraints on the nuclear testing program are imposed. The Secretary of Defense shall be responsible for identifying future military and deterrent requirements. The Secretaries of Defense and Energy shall be responsible for maintaining a nuclear weapons technology base to support these requirements. The Secretary of Energy, in coordination with appropriate Department of Defense organizations responsible for other nuclear testing requirements, shall examine the technical impact of possible further restraints on nuclear testing. The Secretary of Defense shall be responsible for examining the military consequences of possible further restraints on nuclear testing. The Secretaries of Defense and Energy shall examine the feasibility and effect of possible further restraints on nuclear testing on our ability to achieve high confidence in the maintenance of a reliable, safe, and militarily effective nuclear stockpile and other deterrent systems. The Secretary of Defense shall also assess how the survivability of command, control, and communication networks can be maintained if testing of nuclear weapons effects on components thereof is limited by a lower threshold or comprehensive test-ban.

REPORT ON REMANUFACTURE OF NUCLEAR STOCKPILE WEAPONS

The committee desires to become fully informed regarding the technical options and costs for the remanufacture and substitution of proven nuclear weapon designs in the stockpile in the event that future budget limitations and possible negotiated restrictions on nuclear testing limit future opportunities to develop and certify the performance of new weapon designs. The committee directs the Secretary of Energy, in consultation with the Secretary of Defense, to submit a report on the remanufacture of nuclear weapons in the stockpile that will require replacement at the end of their stockpile life. Classified and unclassified versions of this report shall be submitted not later than May 1, 1990. The report shall include the following information:

(1) A specification of the nuclear warheads and bombs now in the stockpile which will not be replaced at the end of their stockpile life;

(2) A case-by-case analysis of the technical requirements and estimated costs to prepare for the remanufacture of each certified nuclear weapon design scheduled for retention in the stockpile;

(3) A specification of certified weapons designs designated for retention in (2) above that could be remanufactured and recertified for the stockpile without conducting a nuclear explosive test;

(4) Identification of those certified weapon designs included in (2) above requiring changes to permit remanufacture which could be recertified with a single nuclear explosive proof test to demonstrate proper performance, and the minimum essential yield for each such test;

(5) Identification of those certified weapon designs planned for retention in (2) above requiring modification for remanufacture to the degree that more than one test is indicated to assure proper performance, and the minimum essential number and yield of tests required for each design so modified; and

(6) A description of other options that may be employed in the event of reduced reliance on nuclear test explosions, ranging from increasingly extensive modifications of existing designs to the introduction of entirely new designs. The costs in time, funds, numbers and yields of tests, and the postulated national security benefits of each of these options shall be clearly set forth in a manner which allows the relative costs and benefits of all the options presented to be directly compared.

AUTHORIZATION AND FUNDING FOR ROCKY FLATS AGREEMENT

In recognition of the extraordinary circumstances at the Rocky Flats Plant, Colorado, the committee recommends a provision that would authorize the Secretary of Energy to make payments to carry out an agreement entered into on June 16, 1989 between the State of Colorado and the Department of Energy, and to enable the State of Colorado to ensure the safety, purity, and cleanliness of the drinking water of those communities whose water supply flows through, runs off, or is otherwise affected by air or water emissions of the Rocky Flats Plant, by means of testing and related activities. The provision would provide that not less than $2.9 million and not more than $3.435 million be obligated to carry out such agreement and to provide for testing and related activities.

OVERFLIGHT RESTRICTIONS AT DOE DEFENSE FACILITIES

Over the last decade, airspace restrictions to protect the Department of Energy's defense facilities from a potential terrorist attack or from damage due to a crash have gradually been eliminated, leaving these critical and unique facilities with virtually no protection against an airborne attack or accident. As far back as 1982, the General Accounting Office found that DoE nuclear sites were not being adequately protected against the threat of airborne intrusion by terrorists. This report stated:

> DoE's weapons facilities are also vulnerable to penetration from the air . . . [N]uclear production plants are still not even afforded the same level of airspace protection that is given to national parks, monuments, seashores, and other recreation or preserve areas. . . . The lack of protected airspace means that action would not be taken against an intruding aircraft until a penetration team is on the ground. By that time valuable response time has been wasted and it may be too late to stop the penetration team from accomplishing its objectives.

Current regulation provides only for a *voluntary* limit on airspace under 2000 feet. The committee agrees with the Secretary of Energy that this voluntary arrangement is " far from satisfactory" and that the critical and unique responsibilities of the Department of Energy "warrant the kind of protection . . . that only prohibited airspace can provide."

Accordingly, the committee directs the Secretary of Energy and the Secretary of Transportation to prepare in collaboration a report providing an approach and implementation plan for restricting airspace over DoE defense facilities. The implementation plan should be capable of being fully executed within 90 days. The report should be submitted to the committee not later than 60 days after enactment of this act.

FEED MATERIALS PRODUCTION CENTER

The President's report to the Congress on the *Modernization of the Nuclear Weapons Complex* found that Feed Materials Production Center (FMPC) at Fernald, Ohio is "severely deteriorated" and that the projected workload is decreasing due to the Department of Energy's decision to discontinue operation of the N-reactor. This report also found that it would be cost-effective to transfer FMPC's remaining functions.

The committee supports the Department of Energy's plans to phase-out operations at the FMPC and to continue environment, safety, and health activities. The committee urges the Department of Energy to accelerate these activities where possible and to preproduce depleted uranium materials during fiscal year 1990 in order to cease production operations at FMPC at the end of the fiscal year. The committee is aware of U.S. commercial vendors who have the capability to provide modern, environmentally safe production of depleted uranium metal for Department of Energy requirements. Accordingly, the committee directs the Department of Energy to transition from the manufacture of depleted uranium metal at the FMPC to acquisition from domestic commercial producers on a competitive basis beginning in fiscal year 1990. The committee requests the Secretary of Energy to submit an implementation plan for this transition, including a schedule for complying with applicable environmental laws and regulations and for qualification of commercial vendors, not later than March 1, 1990.

ENVIRONMENT, SAFETY, AND MANAGEMENT IMPROVEMENTS FOR THE DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

The Department of Energy faces a crisis in managing its defense facilities and in meeting environmental and safety requirements. Many of the facilities of the nuclear weapons complex are approaching the end of their useful life and need to be modernized or replaced. In addition, activities at all facilities must be brought into compliance with environmental and safety requirements.

The committee believes that a comprehensive set of measures is needed to correct problems at the Department's defense facilities. First, additional funds and a more structured program are needed to clean up radioactive and hazardous waste and environmental contamination. Second, Congress and the Department need to have better tools for managing DoE's programs and expenditures. Third, the approach to managing and funding environmental restoration and defense waste activities over the long-term requires an in-depth, independent analysis. All these actions must be taken even as the Department continues to meet its primary missions of research, development, and production of nuclear weapons.

Accordingly, the committee recommends a number of legislative provisions to address environmental, safety, and management issues at the Department's defense facilities. The committee has approved these provisions for the Department of Energy's defense programs in a separate measure that will be offered for the consideration of the Senate during its debate on the defense authorization bill.

ENVIRONMENTAL RESTORATION AND WASTE OPERATIONS AT DEPARTMENT OF ENERGY DEFENSE FACILITIES

Over the last few years, the committee has become increasingly concerned that the resources needed to correct environmental contamiantion at Department of Energy defense facilities exceed the amounts requested by the administration. For fiscal year 1989, the committee recommended a 40 percent increase in the environmental restroation budget to $170 million. While the committee is pleased that the administration has more than doubled the amount requested for environmental restoration for fiscal year 1990 to $401 million, this amount is still insufficient to meet the Department of Energy's substantial environmental needs. Virtually every witness who testified before the committee on environmental priorities, including Department of Energy officials, indicated that the Department of Energy's needs exceed the amounts requested by the administration for fiscal year 1990.

Accordingly the committee recommends authorization of $640.293 million for environmental restoration activities in fiscal year 1990, an increase of $239 million over the administration's budget request. This additional funding should be directed at the Department of Energy's most urgent environmental needs. The committee also recommends an increase of $179 million for waste operations and projects, for a total of $747.167 million. These additional funds should be directed at projects that are most likely to mitigate current interim storage problems or reduce the risks of long-term treatment or disposal. The committee's recommendation reflects the need for significant additional resources for environmental restoration and defense waste operations over the long term.

The committee is concerned, however, that the recommended increase may be too great for DoE to absorb in one fiscal year. Accordingly, the committee directs DoE to maintain in the environmental restoration and waste operations accounts, funds that cannot productively be expended in fiscal year 1990. The committee directs the Secretary of Energy to report on the funding allocations for the environmental restoration and waste operations appropriations act for fiscal year 1990.

The committee is concerned about the way funds for environmental restoration are presented in the annual budget documents submitted to Congress. First, funds requested for environmental compliance at currently operating facilities are not separately identified in the budget request, unlike funds for environmental restoration of inactive sites, which are contained in the environmental restoration account. The committee directs the Secretary of Energy, in future budget requests, to consolidate all funding requests for environmental activities. Second, funding for the environmental restoration account, as requested for fiscal year 1990, includes funding for both remedial actions at inactive waste sites and for decontamination and decommissioning of obsolete defense facilities. Decontamination and decommissioning costs will continue to rise as more DoE defense facilities reach the end of their useful life.

The committee is concerned that decontamination and decommissioning occur on a timely schedule and that such activities are not left as liabilities for future generations. In order to highlight the importance of such activities, the committee recommends that funding for decontamination and decommissioning be a separate line item in the budget. The committee also requests the Secretary of Energy to submit a report, as part of the annual budget submission, on the number of defense facilities requiring decontamination and decommissioning, the expected cost, the schedule for completion, and the current status of the facility.

BUDGET PRIORITIES FOR DEPARTMENT OF ENERGY DEFENSE PROGRAMS

Fiscal year 1990 is the second successive year in which the committee has recommended increasing funds for Department of Energy defense programs when the overall defense budget is decreasing. In fiscal year 1989, the committee recommended, and the Congress authorized, an increase of $50 million for environmental restoration at the Department of Energy's extensively contaminated defense facilities. This year, the committee recommends an increase of $418 million for environmental restoration and waste operations (over the administration's request) for a total of $1,554.426 million for environmental restoration and waste operations. The committee also recommends an increase of $100 million to accelerate the research and development of cleanup technologies.

The committee urges the administration to ensure that adequate funds are requested for fiscal year 1991 to address the critical needs of DoE defense facilities: full compliance with environmental laws and regulations, vigorous action on the cleanup of contaminated sites, and continued modernization or replacement of aging facilities. Worthy as these needs are, however, the committee cannot continue to transfer ever-larger sums from DoD to DoE, inasmuch as this process is complicated by the budget allocation and appropriations processes. Therefore, the committee wishes to put the administration on notice that, if shortfalls continue in the funds requested to meet the critical needs of DoE defense facilities in the fiscal year 1991 budget, the priorities which will guide the committee's action are (1) compliance with current environmental laws and regulations; (2) clean up of contaminated sites; and (3) modernization of aging facilities.

For fiscal year 1991, the committee recommends that funds for environmental restoration and waste operations be increased by $600 million over the fiscal year 1991 budget request. These are the only DoE authorizations recommended by the committee for fiscal year 1991, in deference to the new Secretary of Energy's request that he be permitted to modify and resubmit a request for fiscal year 1991 in light of his new priorities for the Department of Energy.

COMPLIANCE WITH ENVIRONMENTAL LAWS

The committee is concerned about the widespread lack of compliance with environmental laws and regulations at Department of Energy defense facilities. Compliance with environmental laws is absolutely demanded at Department of Energy defense facilities. Both the Department of Energy and the operating contractor must share in the responsibility for ensuring full compliance with applicable laws and regulations, including commitments under federal facility compliance agreements. The committee is encouraged by the Department of Energy's review of the determinants of the award fee for contractor operation of DoE defense facilities and by the Secretary of Energy's decision that over one-half of the contractor's available award will be based on compliance with environmental, safety and health requirements. The committee supports the Department of Energy's efforts to implement incentive structures that ensure that operating contractors at DoE defense facilities have a significant stake in environmental, safety and health compliance. One such method would be deducting penalties imposed for failure to comply with environmental laws from the contractor's award fee.

MAJOR DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

One of the management tools needed by Congress and the Department of Energy is the ability to track the progress of major programs for mission, cost, and schedule compliance. For major programs of the Department of Defense, the Selected Acquisition Reports currently serve that purpose.

The committee thus recommends a provision that would require the Department of Energy to report in a similar manner on major DoE defense programs. The provision would require the Secretary of Energy to submit reports on each major defense program containing a description of the program; its purpose and relationship to the mission of the national security program of the Department of Energy; the program schedule, including estimated annual costs; a comparison of the schedule and cost estimates with previous estimates of schedule and costs; and an explanation of changes. Reports would be required for all programs on an annual basis and on a quarterly basis for programs with a change in cost of more than 5 percent or a change in schedule of more than 90 days since the last report. A major defense program would be defined as one with an estimated cost of more than $500 million in fiscal year 1989 constant dollars. Programs about which such reports are submitted should be identified in the annual budget request documents.

FIVE-YEAR PLAN

The Department of Energy currently faces some of the most difficult budgetary choices ever to confront the nuclear weapons complex. First, most of the Department of Energy's facilities are approaching the end of their useful life and will need to be rebuilt or replaced over the next decade or so. Second, modern safety features must be incorporated into all of the Department of Energy's facilities. Third, nuclear and hazardous waste disposal and environmental needs will require significant funding increases in the coming years.

While the Department of Energy has informally utilized long-term planning methods, it has lacked the detailed five-year planning system that has been successfully developed within the Department of Defense. The committee believes the five-year planning system within the Department of Defense is the most important management tool available for reconciling needed programs, projects and activities with realistic five-year funding projections.

The committee believes that the pressing problems facing the Department of Energy require a comprehensive five-year planning system patterned after the one developed by the Department of Defense. Accordingly, the committee recommends a provision that would require the Secretary of Energy to submit a five-year plan for the Department of Energy's defense programs on an annual basis. This plan should be the basis for the Department of Energy's submission to the President for purposes of presenting the annual budget as specified in title 31, United States Code. This plan will provide a roadmap for the future and aid Congress in making the difficult budgetary choices that will confront the nuclear weapons complex in the next decade. The five-year plan should be based on the same budgetary assumptions used by the Office of Management and Budget. The committee does not intend such a plan to become a "wish-list" of programs; rather, the plan should be consistent with estimated expenditures and proposed appropriations based on sound and accepted budgetary principles.

CLEANUP TECHNOLOGY PROGRAM

One of the most pressing needs in the Department of Energy today is advancement of the technologies and methods used to clean up the environmental contamination throughout the nuclear weapons complex. Department of Energy witnesses testified that "There are . . . contaminants that we have throughout the DoE complex for which there is no known cost-effective technology." Examples of current problems for which Department of Energy witnesses stated a cost-effective technology is not yet available include the single-shell tanks at Hanford, Washington, buried transuranic waste at the Idaho National Engineering Laboratory, and the radon-contaminated silos at Fernald, Ohio.

To date, the technical talent that exists at the Department of Energy's laboratories and among universities and contractors has not been sufficiently harnessed in a coordinated national effort to advance the state of the art in technologies for environmental cleanup and waste minimization. Technological advances have the potential to accelerate cleanup schedules and reduce long-term costs.

Accordingly, the committee recommends a provision that would direct the Secretary of Energy to establish a "Cleanup Action Program" for coordination of the research and development of technologies for environmental restoration and waste minimization. The Secretary of Energy would appoint a program manager for the Cleanup Action program who will be responsible for supervising and directing the research and development of technologies for environmental restoration and waste minimization. The provision would direct the Secretary of Energy to coordinate with the Administrator of the Environmental Protection Agency to ensure consistency and to avoid duplication of research and development efforts on technologies for environmental restoration and waste minimization. The provision would require the Secretary of Energy to submit an annual report on the Cleanup Action program. The committee recommends approval of not less than $200 million for fiscal year 1990 for the Cleanup Action program.

BLUE RIBBON TASK GROUP ON ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT

For the forseeable future, one of the major missions of the Department of Energy's defense programs will be restoration of environmentally-contaminated sites and management and disposal of radioactive and hazardous wastes produced in defense operations. The Presidnet's report to Congress on the *Modernization of the Nuclear Weapons Complex* identified environmental corrective actions as among the highest priority activities and characterized them as "time-critical and essential to current operations." These activities will require significant and sustained funding increases in coming years. The modernization report estimates that about 25 percent of all defense program funding over the next 20 years will be needed for environmental restoration and defense waste activities.

The committee believes that Congress would benefit from the recommendations of independent experts on developing a long-term approach to funding environmental restoration and defense waste management activities at Department of Energy defense facilities. No adequate scientific or analytic framework currently exists for such a long-term cleanup problem. The Superfund model, while attempting to address a related set of environmental problems, differes significantly in its ability to tap private industry as a major source of revenue for cleanup activities. The Department of Energy's defense facilities are owned by the federal government. As such, they present a unique and different case.

The committee therefore recommends a provision that would establish a Blue Ribbon Task Group on Environmental Restoration and Defense Waste Management at Department of Energy facilties. The Task Group would consist of seven members, three appointed by the President, and one each appointed by the Chairman and Ranking Minority Members of the Committees on Armed Services of the Seante and House of Representatives. The provisions would require the Task Group to report to Congress on (1) improvements to procedures used by the Department of Energy in establishing requirements, providing necessary resources, planning and implementing plans for environmental restoration and defense waste management; (2) improvements in budgeting, organization, and management procedures for environmental restoration and defense waste management; (3) policies and procedures for achieving, maintaining, and enforcing compliance with applicable environmental laws; (4) priorities for implementing measures to bring atomic energy defense facilties into compliance with applicable environmental laws; (5) actions needed to promote the Department of Energy's ability to achieve programmatic milestones; (6) additional funding needed for long-term environmental restoration and defense waste management; and (7) alternative funding mechanisms, including whether a trust fund should be established. The Task Group will report on these matters to the President and the Committees on Armed Services of the Senate and House of Representatives not later than January 15, 1991.

EXECUTIVE MANAGEMENT TRAINING IN THE DEPARTMENT OF ENERGY

One of the critical management tools needed for the Department of Energy's atomic energy defense activities is a management training program. Such a program will help the Department to implement the principle of strict accountability in line management for environment, safety, and health, as well as for effective program management. The committee thus recommends a provision that would direct the Secretary to initiate and implement such a program

MISSIONS OF THE DEFENSE PROGRAMS OF THE DEPARTMENT OF ENERGY

Over the last decade, the activities of the defense programs of the Department of Energy have significantly expanded to include (1) responsibility for nuclear and hazardous waste management and environmental restoration of DoE defense sites, and (2) research and development of technologies with applications to the verification of arms control agreements. Accordingly, the committee includes a provision which would amend section 91 of the Atomic Energy Act (42 U.S.C. 2121(a)) to specify the importance of these missions, in addition to the traditional missions of nuclear weapons research, development, and production.

Fiscal Year 1990 Department of Energy National Security Programs
[Amounts in millions of dollars]

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
Weapons Activities...........................	4,234.441	4,437.909	(2.000)	4,349.909
Operating Expenses.........................	3,559.129	3,620.270	1.000	3,621.270
Construction..............................	403.058	528.764	(3.000)	525.764
Capital Equipment.........................	272.254	288.875	0.000	288.875
Undistributed Reduction (NDEW)...........			(86.000)	
Nuclear Materials Production.................	1,985.859	2,213.574	(75.000)	2,138.574
Operating Expenses.........................	1,556.772	1,654.691	0.000	1,654.691
Construction..............................	326.587	454.458	(75.000)	379.458
Capital Equipment.........................	102.500	104.425	0.000	104.425
a/ Defense Waste and Environmental Restoration	974.900	1,301.731	518.000	1,819.731
Operating Expenses.........................	728.024	1,064.639	518.000	1,582.639
Construction..............................	194.180	186.966	0.000	186.966
Capital Equipment.........................	52.716	50.126	0.000	50.126
Verification and Control Technology..........	154.600	149.878	35.000	184.878
Operating Expenses.........................	146.200	139.146	35.000	174.146
Construction..............................		1.000	0.000	1.000
Capital Equipment.........................	8.400	9.732	0.000	9.732
Nuclear Safeguards and Security..............	80.200	87.208	0.000	87.208
Operating Expenses.........................	75.400	82.241	0.000	82.241
Capital Equipment.........................	4.800	4.967	0.000	4.967
Security Investigations......................	40.000	41.200	0.000	41.200
Operating Expenses.........................	40.000	41.200	0.000	41.200

a/ Authorization for Defense Waste and Environmental Restoration
is provided in a separate measure.

Fiscal Year 1990 Department of Energy National Security Programs
[Amounts in millions of dollars]

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
New Production Reactors.........................		303.500	0.000	303.500
Operating Expenses.......................	b/	203.500	0.000	203.500
Construction.............................	–	100.000	0.000	100.000
Naval Reactors Development....................	630.000	652.000	0.000	652.000
Operating Expenses.......................	555.400	562.800	0.000	562.800
Construction.............................	26.600	35.200	0.000	35.200
Capital Equipment........................	48.000	54.000	0.000	54.000
TOTAL, DOE DEFENSE ACTIVITIES............	8,100.000	9,387.000	410.000	9,797.000

b/ The New Production Reactors was funded under Nuclear Materials Production through
– FY 1989. Starting in FY 1990, it is a separate decision unit.

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
Total DOE Operating Expenses..................	6,660.825	7,586.487	554.000	8,142.487
Total DOE Plant Construction Expenses........	950.405	1,286.388	(78.000)	1,208.388
Total DOE Capital Equipment..................	488.870	512.125	0.000	512.125
Undistributed Reduction (NDEW)...............			(66.000)	
TOTAL, DOE DEFENSE ACTIVITIES..............	8,100.000	9,387.000	410.000	9,797.000
Defense Nuclear Facilities Safety Board.......	[7.000]	0	10.000	10.000
TOTAL, ATOMIC ENERGY DEFENSE ACTIVITIES.....	8,107.000	9,387.000	420.000	9,807.000

Fiscal Year 1990 Department of Energy National Security Programs
[Amounts in millions of dollars]

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
Operating Expenses				
WEAPONS ACTIVITIES				
Research and Development	1,049.820	1,085.870	5.000	1,090.870
Nuclear Directed Energy Weapons	113.790	(117.700)	0.000	(117.700)
Inertial Confinement Fusion	(155.530)	(180.200)	(5.000)	(185.200)
Testing	518.464	532.800	0.000	532.800
Nuclear Directed Energy Weapons	(108.464)	(110.900)	0.000	(110.900)
Production and Surveillance	1,909.445	2,104.097	(4.000)	2,100.097
Program Direction	81.400	97.903	0.000	97.903
Weapons Program	(72.166)	(88.853)	0.000	(88.853)
Community Assistance	(9.234)	(9.050)	0.000	(9.050)
Total, Weapons Activities	3,559.129	3,820.270	1.000	3,821.270
NUCLEAR MATERIALS PRODUCTION				
Reactor Operations	587.976	578.049	0.000	578.049
Processing of Nuclear Materials	511.717	589.809	0.000	589.809
Special Isotope Separation	(72.300)	(78.744)	0.000	(78.744)
Supporting Services	259.679	282.868	0.000	282.868
Enriched Material	169.000	168.900	0.000	168.900
Naval Reactors Uranium Enrichment	(169.000)	(168.900)	0.000	(168.900)
Program Direction	28.400	35.265	0.000	35.265
Total, Nuclear Materials Production	1,556.772	1,654.891	0.000	1,654.891

Fiscal Year 1990 Department of Energy National Security Programs
[Amounts in millions of dollars]

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
Operating Expenses (continued)				
DEFENSE WASTE AND ENVIRONMENTAL RESTORATION				
Environmental Restoration..................	159.325	401.293	239.000	640.293
Waste Operations and Projects..............	532.042	568.167	179.000	747.167
Waste R&D & Compliance Technology..........	66.837	100.388	100.000	200.388
Waste Research and Development............	(58.460)	(90.225)	0.000	(90.225)
Hazardous Waste and Compliance Technology	(8.377)	(10.163)	0.000	(10.163)
Transportation Management..................	9.720	11.841	0.000	11.841
Program Direction..........................	3.100	2.950	0.000	2.950
Use of Prior Year Balances.................	(43.000)			
Total, Defense Waste & Environ. Restor...	728.024	1,084.639	518.000	1,602.639
VERIFICATION AND CONTROL TECHNOLOGY				
Verification and Control Technology........	148.200	139.148	35.000	174.148
Total, Verification & Control Tech.......	148.200	139.148	35.000	174.148
NUCLEAR SAFEGUARDS AND SECURITY				
Nuclear Safeguards and Security............	75.400	82.241	0.000	82.241
Total, Nuclear Safeguards and Security	75.400	82.241	0.000	82.241
SECURITY INVESTIGATIONS	40.000	41.200	0.000	41.200
NEW PRODUCTION REACTORS				
New Production Reactors................		203.500	0.000	203.500
Total, New Production Reactors..........		203.500	0.000	203.500

Fiscal Year 1990 Department of Energy National Security Programs
[Amounts in millions of dollars]

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
Operating Expenses (continued)				
NAVAL REACTORS DEVELOPMENT				
Plant Development	83.000	87.000	0.000	87.000
Reactor Development	236.700	245.300	0.000	245.300
Reactor Operation and Evaluation	222.700	217.000	0.000	217.000
Program Direction	13.000	13.500	0.000	13.500
Total, Naval Reactors Development	555.400	562.800	0.000	562.800
TOTAL, DOE DEFENSE ACTIVITIES OPERATING EXPENSES	6,650.925	7,588.487	554.000	8,142.487

Program	FY 1989 Appropriation	FY 1990 Authorization Request	Senate Change Amount	Senate Authorization FY90
CAPITAL EQUIPMENT				
Weapons Activities..........................	272.254	288.875	0.000	288.875
Nuclear Directed Energy Weapons..........	(17.508)	(18.875)	0.000	(18.875)
Inertial Confinement Fusion.............	(8.240)	(8.740)	0.000	(8.740)
Nuclear Materials Production...............	102.500	104.425	0.000	104.425
Defense Waste & Environmental Restoration..	52.716	50.126	0.000	50.126
Verification and Control Technology........	8.400	9.732	0.000	9.732
Nuclear Safeguards and Security............	4.800	4.967	0.000	4.967
Naval Reactors Development.................	46.000	54.000	0.000	54.000
TOTAL, DOE DEFENSE ACTIVITIES CAPITAL EQUIPMENT......................	486.670	512.125	0.000	512.125

TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Last year Congress created the Defense Nuclear Facilities Safety Board to provide independent safety oversight for the Department of Energy's defense facilities and authorized the Secretary of Energy to transfer to the Board up to $7 million to carry out its responsibilities during fiscal year 1989. The administration did not request funds for the operation of the Board in fiscal year 1990. The committee recommends authorization of $10 million for the Board to carry out its responsibilities in fiscal year 1990.

TITLE XXXIII—NATIONAL DEFENSE STOCKPILE

The committee bill includes four provisions concerning the National Defense Stockpile.

Section 3301 authorizes changes in the quantities of 21 materials to be acquired for the stockpile. These changes are needed to implement the recommendations of the Secretary of Defense in the *Report to the Congress on Stockpile Requirements*, which was submitted on April 12, 1989 pursuant to section 14 of the Stockpiling Act.

Section 3302 authorizes $140 million for the acquisition and upgrade of stockpile materials for the National Defense Stockpile in both fiscal years 1990 and 1991.

Section 3303 authorizes disposal of 19 different materials currently held in the stockpile, these materials having been determined to be excess to the current requirements of the stockpile. The Administration estimates receipts of $140 million for the Stockpile Transaction Fund from the disposal of stockpile materials in both fiscal years 1990 and 1991.

Section 3304 expands the conditions under which the Stockpile Manager can provide for the rotation of stockpile materials pursuant to section 6(a)(4) of the Stockpiling Act (50 U.S.C. 98 *et seq.*)

TITLE XXXIV—CIVIL DEFENSE

The committee once again declares its position that the Federal Emergency Management Agency (FEMA) civil defense program must give primacy to preparedness for national defense contingencies. Attempts to weaken this mission or to seek exceptions will only jeopardize the support of this committee for continued civil defense funding as a defense function, and thereby place at risk the funding source for many of the states' collateral activities in natural disaster planning and preparedness.

The committee notes that the FEMA civil defense budget rose about six percent in real terms last year and nearly two percent in this year's request (controlling for the transfer of the National Emergency Training Center funding). The committee recommends authorizing the amended defense budget request for fiscal year 1990, but cautions FEMA that these growth rates may not be sustainable as the defense budget as a whole continues to decline in real terms. The committee does not authorize an amount for fiscal year 1991.

DEPARTMENTAL RECOMMENDATIONS

BY letter dated May 11, 1989, the Deputy General Counsel of the Department of Defense forwarded to the President of the Senate proposed legislation "To authorize appropriations for fiscal years 1990 and 1991 for military functions of the Department of Defense and to prescribe military personnel levels for such Department for fiscal years 1990 and 1991, and for other purposes." The transmittal letter and proposed legislation were officially referred as Executive Communication 1127 to the Committee on Armed Services on May 17, 1989. Senators Nunn and Warner introduced this legislative proposal as S. 1085, by request, on May 31, 1989. The statement made by Senator Nunn upon introduction of S. 1085, together with the text of the legislation, appear in the *Congressional Record* of May 31, 1989 on pages S5823–5826.

By letter dated May 2, 1989, the Deputy General Counsel of the Department of Defense forwarded to the President of the Senate proposed legislation "To authorize certain construction at military installations for fiscal years 1990 and 1991, and for other purposes." The transmittal letter and proposed legislation were officially referred as Executive Comunication 1070 to the Committee on Armed Services on May 11, 1989. Senators Nunn and Warner introduced this legislative proposal as S. 1083, by request, on May 31, 1989. The statement made by Senator Nunn upon introduction of S. 1083, together with the text of the legislation, appear in the *Congressional Record* of May 31, 1989 on pages S5810–5822.

By letter dated March 8, 1989, the Acting General Counsel of the Federal Emergency Management Agency forwarded to the President of the Senate proposed legislation "To authorize appropriations for civil defense programs for fiscal years 1990 and 1991." The transmittal letter and proposed legislation were officially referred as Executive Communication 733 to the Committee on Armed Services on April 4, 1989. Senators Nunn and Warner introduced this legislative proposal as S. 1084, by request, on may 31, 1989. The statement made by Senator Nunn upon introduction of S. 1084, together with the text of the legislation, appear in the *Congressional Record* of May 31, 1989 on page S5823.

COMMITTEE ACTION

In accordance with the Legislative Reorganization Act of 1946, as amended by the Legislative Reorganization Act of 1970, there is set forth below the committee vote to report the National Defense Authorization Act for Fiscal Years 1990 and 1991.

In favor: Senators Nunn Exon, Levin, Kennedy, Bingaman, Dixon, Glenn, Gore, Wirth, Shelby, Byrd, Warner, Thurmond, Cohen, Wilson, McCain, Wallop, Gorton, Lott, and Coats.

Opposed: None.

Vote: 20–0.

The other roll call votes on amendments to the bill which were considered during the course of the markup have been made public and are available at the committee.

FISCAL DATA

Section 252 of the Legislative Reorganization Act of 1970 (Public Law 91–510) requires that the report accompany each bill reported by a Senate committee contain certain information on five-year cost projections.

The letter received in compliance with this statutory requirement is shown below. The bill is an annual authorization and does not, within its own terms, generate costs beyond fiscal years 1990 and 1991, even though the funds authorize to be obligated by this act may not be expended for several years in the future. The fiscal year authorizations herein provided are reviewed annually by the committee and the Congress.

COMPTROLLER OF THE DEPARTMENT OF DEFENSE
WASHINGTON, DC 20301-1100

JUN 7 1989

Honorable Sam Nunn
Chairman, Committee on Armed Services
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In accordance with Section 252 of the Legislative Reorganization Act of 1970 (P.L. 91-510), the schedule below provides an estimate of how the authorization now requested in the Bush Revised Budget for FY 1990 will be expended.

Estimated Expenditure
($ in Millions)

FY 1990 Authorization Request:	$213,978
FY 1990	105,966
FY 1991	56,164
FY 1992	28,739
FY 1993	12,849
FY 1994	6,129
Beyond	4,131

Sincerely,

Sean O'Keefe
Comptroller

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

It was impracticable to include the Congressional Budget Office cost estimate on this legislation because it was not available at the time the report was filed. It will be included in material presented during floor debate on the legislation.

REGULATORY IMPACT

Paragraph 11(b) of rule XXVI of the Standing Rules of the Senate requires that a report on the regulatory impact of a bill be included in the report on the bill. The committee finds that there is no regulatory impact in the case of the National Defense Authorization Act for Fiscal Years 1990 and 1991.

CHANGES IN EXISTING LAW

Pursuant to the provisions of paragraph 12 of rule XXVI of the Standing Rules of the Senate, the changes in existing law made by certain portions of the bill have not been shown in this section of the report because, in the opinion of the committee, it is necessary to dispense with showing such changes in order to expedite the business and reduce the expenditure of funds to the Senate.

ADDITIONAL VIEWS OF MR. EXON

I strongly support the Armed Services Committee's version of the National Defense Authorization Bill. The Committee showed tremendous responsibility and discipline in "holding the line" against non-requested funding and the restoration of terminated programs. I think it extremely important that Senators understand that we are facing the fifth consecutive year of real decline in defense spending and that "business as usual" cannot be tolerated in such a budgetary environment. We can always find a few tens or hundreds of millions to keep a program alive; but we cannot afford the price down the road. Our current defense budgetary morass is due to the failure of the previous Administration and ourselves to demonstrate proper fiscal responsibility. I will strongly oppose any effort to return to the old ways of doing business.

I take great pleasure in the fact that the Committee approved all major programmatic and funding decisions of the Subcommittee on Strategic Forces and Nuclear Deterrence, which I chair. The Subcommittee's funding and policy recommendations on ICBM modernization, SDI, the B-2 and B-1 bombers, the Advanced Cruise Missile, the Trident missile submarine and D-5 missiles, anti-satellite programs, chemical defense equipment, and theater nuclear modernization were all approved. Comprehensive restrictions on the obligations of funds for the bomber and cruise missile programs were enacted and we will "fly before we buy". The result is a balanced, affordable, bipartisan package which I will support on the floor.

Included in this bill are major initiatives undertaken by the Strategic Subcommittee in the area of the Energy Department's nuclear weapons complex. The Committee addressed these questions of safety, cleanup, production, and modernization in a comprehensive package of funding and legislation. A total of $1.82 billion was provided for cleanup efforts and research, including a new program to accelerate the development of cleanup technologies. Additional environmental, safety, and management provisions approved by the Committee include the establishment of a Blue Ribbon Task Group to explore methods for determining cleanup priorities and obtaining stable funding for the cleanup effort, five year planning for the Energy Department's Defense Programs, and the recognition that environmental restoration is one of Defense Programs' major missions.

Perhaps the greatest security challenge facing our nation is the need to develop a safe, reliable source of tritium for our nuclear weapons. Restoring the Savannah River Plant reactors to a safe, operating capability must be a priority. Since these reactors will have only a limited lifetime, full funding was provided for the new production reactor program. Funding for the Special Isotope Separation (SIS) project for plutonium was reduced by $75 million, delaying the construction by at least one year. Before additional funding for this project can be approved, the Secretary of Energy must certify that the SIS project technology has been proven and that all environmental requirements have been met.

The Committee also improved the Nuclear Test Ban Readiness Program by ensuring that it will address the future military effectiveness of nuclear weapons in the event of a test ban or further test restrictions, as well as the safety and reliability of nuclear weapons. The Committee though that this had been achieved last year only to learn through a colloquy on the House floor that the House had an interpretation different than the one the conferees had agreed to.

I generally support the Committee's actions in the conventional area as well. Restoring the proposed reductions in advanced conventional munitions is essential if we are to be combat ready. Given the reduced amount of available defense spending, the additional $397 million approved for the Reserve and National Guard seems to be the most we can do. In fact, given the poor readiness of many critical reserve component units, we do need to thoroughly review the Total Force concept and ensure that we have a sound approach in this area. This is a major issue with profound strategic and fiscal implications. The 3.6% pay increase, improvements to the G.I. Bill, and longer service obligations for academy graduates and pilots are actions which I also support.

In all, this is an excellent bill which I urge my colleagues to support without major change.

J. JAMES EXON.

ADDITIONAL VIEWS OF MR. LEVIN

The Senate Armed Services Committee has reported out a bill that addresses many of the legitimate needs of our armed forces. It provides funding to preserve the readiness of our troops and makes strides toward redressing our existing war stock and sustainability problems. However, the bill also contains a number of provisions that represent wrong priorities.

The budget that the President sent to the Congress made significant reductions in important conventional weapon programs, including munitions. It proposed that eight major weapon programs be terminated either in FY90 or FY91. At the same time the budget requested that we buy two new ICBMs and increase the funding for SDI.

In an attempt to realign our defense priorities, I offered an amendment during the committee mark-up which would have preserved the manufacture of two important programs slated for termination—the Navy's F-14D fighter and the Army's Apache helicopter. To finance these two programs I proposed holding SDI funding to zero real growth over the next five years. This amendment was defeated even though it would have allowed a small increase each year in the level of funding for SDI. After spending over [$16] billion on SDI the Congress, and the executive branch, are still not sure where this program is headed, and yet its level of funding continues to grow dramatically. This just does not make sense given the needs of other programs.

It also does not make sense to continue to fund the development of two new mobile land-based nuclear missiles—the road-mobile Midgetman and the rail-based MX. The President has stated that he needs both missiles to be funded before he can decide whether the U.S. should change its negotiating position at the START talks, which currently calls for a ban on mobile missiles. This approach represents a lack of leadership and is born out of political deadlock on this issue. The fact is that our current arsenal of nuclear weapons provides deterrence against nuclear attack—either a surprise attack or an attack that follows a crisis. If we really believe that we need a mobile land-based missile, then we should choose one, we don't need two. Unfortunately, this bill funds both weapons.

At the same time that billions are authorized for lesser needed strategic programs, the committee approved the termination of the major conventional weapon programs recommended by the President's budget, with the exception of the V-22. This decision will have implications for our force structure and capability for the next decade. In a time of tight budgets, this action represents a reversal of logic. Many witnesses have testified before the committee that the U.S. lacks conventional capability. Such an inadequacy could tempt an attacker. None of the witnesses have testified that our existing nuclear forces are not capable of deterring nuclear attack.

This year the committee faced the difficult task of allocating increasingly scare resources for the many competing needs of today's military. For the most part of it has done an excellent job. It restored some of the President's proposed cuts in munitions and endorsed other initiatives that will make our forces more effective. However, this job will not become any easier if we continue to provide inflated funding for redundant strategic weapons, like two mobile ICBMs, and unfocussed programs, like SDI. At a time when we possess adequate nuclear deterrence but are faced with legitimate conventional force shortfalls, correcting our conventional deficiencies will do much more to enhance the overall deterrent posture of the United States.

CARL LEVIN.

ADDITIONAL VIEWS OF MR. GLENN

I would like to state my additional views on two issues of particular concern: The need for the continued development and procurement of the Joint Service V-22 Osprey tiltrotor aircraft, and the management of the Air Force's B-2A Stealth bomber development and procurement program.

V-22 OSPREY TILT ROTOR AIRCRAFT

"Twice as far, twice as fast, and at least a third more payload." If someone walked into our offices today proposing such a quantum advance in helicopter capability, we'd not only be interested, we'd probably jump to support it.

"How soon can we get it?"

The answer to that is "now."

The aircraft in question is the V-22 Osprey, nine years in development at a cost of over $2.0 billion, supported by both Houses of every Congress, thoroughly flight tested on a ⅔-scale version (the XV-15) through 785 hours of actual in-the-air experience, first flight already flown on the full-size aircraft, and ready to move into production. But now it has been *terminated* by the Secretary of Defense on the rationale that it is too expensive a program just to provide a "slightly enhanced" capability for the Marine Corps ship-to-shore Amphibious Assault mission.

I would agree completely with that analysis, and I would support termination, *if* that was to be the V-22's major ultimate role, but it's not. The Amphibious Assault role has always been looked at as just the first step in what is a much greater mission capability not only in the Marine Corps but potentially throughout the Department of Defense, and also for civilian commercial use.

To illustrate, just think of all the missions now performed by helicopters, both military and civilian, with new uses being devised almost daily. Now think of all those military and civilian missions that could be accomplished if they could go "twice as far, twice as fast, and with more payload". The V-22 can do that. Importantly, the aircraft also will have a better night and under-the-weather capability, and a better navigation system (both extremely important in modern aviation) than any of the alternative systems.

The V-22 represents a U.S.-invented, quantum leap in vertical lift mission capability. Whatever its future application here or anywhere in the world, a full spectrum mission capability has always been the reason for development of this aircraft, not just Amphibious Assault enhancement for the Marine Corps, valuable as that is in its own right.

Amphibious assault is just a first and obvious use, to be followed by expanded land tactics already being programmed by the Marine Corps, including the full range of helicopter missions. Potentially the V-22 could also be used in Special Operations Force missions, air rescue, weapons platform development, as a new ASW capability, and for extended resupply missions for all types of ships—wherever *"twice as far, twice as fast, with more payload"* will have utility.

Wisely, the Senate Armed Services Committee did not support the Secretary of Defense in his cancellation of the V-22 program, but instead recommended authorization of $255 million in R&D funds for continued flight testing. The Committee, however, declined to recommend funding of $157 million for advance procurement which I proposed. (This advance procurement money would not be for aircraft production, but rather would be used to maintain the already existing manufacturing infrastructure. This would allow DOD to hold to a minimum what otherwise would be exorbitant start-up costs if we decide to produce the aircraft.)

The Committee noted that the Department of Defense over the past nine years has invested over $2.0 billion in developing the V-22. Yet DOD would terminate the program prior to flight testing, despite the fact that 95 percent of the cost to develop the aircraft has already been paid. This makes little sense. Obviously the Senate Armed Services Committee agrees, since in this bill we properly recommended funding V-22 R&D in at least the minimum amount the Navy says they need to keep the program on track.

Additionally, while the defense authorization process must concern itself primarily with military matters, there also is the potential civilian use of the Osprey that must be considered. History is replete with examples of defense research, development, and procurement that has led the way to spin-off civilian use of new products, equipment, or technology.

For example, jet engine development for military use led to production of the KC-135 aircraft, then to the civilian 707 airliner, and ultimately to worldwide commercial sales which made American jet engines and transport aircraft the standard for airlines around the globe.

Helicopters, computers, fuels, food packaging, and materials development are but a few other examples that spring to mind of beneficial spin-offs to civilian use from military-sponsored research and development. While I agree that potential civilian use should not be the driving consideration for procurement of a military aircraft, it would be a head-in-the-sand approach for us not to consider it.

The V-22 has enormous potential applications for civilian use. Emergency evacuation and air medical services, and airline service for remote areas that cannot affort expensive airline-type runways, all become feasible. Also, use of the V-22 as a commuter aircraft on comparatively short range, high density routes has been widely discussed as a possibility; the unique characteristics of the V-22 would make it ideal for city-center to city-center operations, with major time savings compared to our current airport-to-airport service, with its attendant delays from city to airport and return.

Too expensive? Maybe, but is was also thought to be too expensive for the initial development of the jet engine, for the 707, for some military computers, for food packaging, and for many other products developed originally for military use, but which later become more affordable and contributed greatly to our civilian economy both here and around the world.

The question "If it's so great, why aren't the civilian interests investing in it?" is a valid one, and one that probably was asked at a similar stage in all of the programs mentioned above. But proving out, and introducing the new military products, followed by civilian investment and commercialization worldwide has been the normal pattern in the past.

It is my understanding that considerable interest has already been expressed in this aircraft by other nations. So if U.S. termination becomes final, as proposed by the Secretary of Defense, I would expect that the V-22 probably would be produced under foreign licensing—which we could hardly prevent.

If we agree that the V-22 capability is useful for far more than just the Marine Corps amphibious assault mission, then we should ensure that this tilt rotor technology, which was researched in America, developed in America, and tested in America, is built in America, and not sold to the world by the Japanese.

In the Pentagon there are always proponents and opponents of any new program, and the V-22 is no exception. From its earliest days, opponents have stressed a much more limited view of the V-22 potential. In this year's budget presentation they were successful in stressing, almost to the exclusion of other missions, the Marine Corps amphibious assault role. In support of the Pentagon position against the V-22's procurement for the amphibious assault role, quotes of high ranking Pentagon officials to the effect that "The Marines haven't had to make an amphibious landing since Inchon" were widely disseminated and apparently given credibility in the decision making process.

In my view, such statements show at best a tortured logic with regard to DOD decisions that I hope will not become the basis for planning defense procurement. Following through on such currency-of-use logic would mean withdrawing support for torpedo procurement (we haven't fired a torpedo in combat since World War II), no support for attack submarines (same as above), no support for ballistic missile submarines (never used), no support for nuclear weapons (last used at Nagasaki in World War II), and on and on. Obviously, all of our military services—Army, Navy, Air Force, and Marine Corps—taken together, provide us with the full spectrum of war fighting capabilities for use in whatever way is directed, and that includes using the Marine Corps amphibious assault capability.

For all the above reasons, I strongly disagree with the decision of the Secretary of Defense to terminate the V-22 program—"terminate" meaning no more expenditures of any kind on the V-22 program, even for completion of flight testing.

In their mark-up of the FY-90 Defense Authorization Bill, the House Armed Services Committee not only put in V-22 R&D money to fund completion of flight testing, they also included limited advance procurement money for 12 aircraft.

As noted previously, the Senate Armed Services Committee recommended authorization of some R&D money, but did not approve my amendment which would also have provided some advance procurement money for maintenance of infrastructure.

I concur with the opinions expressed by various Senators that have been highly complimentary to the Secretary of Defense for being willing to "bite the bullet" and to make some tough decisions in cutting defense expenditures. I have made similar statements myself complimenting the Secretary. However, I also believe that it is our duty as legislators to give a second opinion on those cuts, and, where we sincerely believe the Secretary is wrong, to take appropriate action to oppose his decision, which in this case I believe was based on faulty information regarding the V-22 and its potential.

For all of the above reasons, I believe that the Congress should include in the FY-90 Defense Authorization Bill sent to the President for signature later this year at least adequate R&D money to continue the V-22 development program in FY-90, and the minimum necessary advance procurement money so that we can maintain the V-22 infrastructure and industrial base while we complete flight testing and determine if we want to proceed to production.

MANAGEMENT OF THE B-2 PROGRAM

Many thousands of hours of research, science, and engineering go into the design of any new military aircraft. But excellent as our scientists and engineers may be, designing aircraft is not an exact science. The sum of all the design efforts must still undergo rigorous flight testing to verify that all the calculations, all the research, and all the inexact design compromises do in fact work together to a degree that make the new plane a good combat aircraft.

Every aircraft development program designates the first test and low rate initial production (LRIP) aircraft to conduct required ground and flight testing. Currently, in the B-2 program, 8 aircraft are being produced for test purposes and 8 more aircraft have been approved for LRIP.

As the ground and flight test program proceeds, problems requiring changes and modifications on subsequent production aircraft will inevitably occur. Depending on the severity of the problem, the cost and/or schedule of the development program can be severely impacted. Even with relative low risk programs, concurrency and the lack of adequate flight testing can lead to major difficulties. DOD has recognized this, and there are several good examples of this in the Amended FY 1990/FY 1991 Budget:

—LRIP of the Navy's new T-45TS training aircraft was deferred for at least two years to correct deficiencies identified during flight testing;

—Ongoing LRIP of the Navy's SH-60F ASW helicopter was stopped for at least a year to allow time for correction of deficiencies identified during flight testing;

—The C-17 LRIP procurement profile was modified until flight testing can begin and until, as the Director of DOD Operational Test and Evaluation recommended, empirical flight tests results are made available on which to base a production decision.

With regards to the management of the B-2 program, the Committee approved the requested B-2 development program and authorized continued LRIP for 3 B-2s in FY-90 at a combined cost of $4.4B. This brings the total number of B-2 aircraft authorized for production through FY-90 to 19 (8 test aircraft, and 11 production aircraft) at a total program cost of $26.8B.

Unfortunately, these aircraft and program costs have been approved without the successful completion of definitive flight testing. Because of this, the Committee established a comprehensive set of restrictions on the obligation of FY-90 funds for the procurement of the 3 LRIP aircraft authorized for FY-90. These restrictions are keyed to demonstrated flight test milestones during FY-90, including completion of the initial block of flight testing and also initiation of low observable testing. Although establishment of these restrictions is a positive step in trying to establish responsible management of the B-2 program, in my opinion, the Committee action does not go far enough.

The problem is that like many previous B-2 program management actions, the newest approach is still success oriented and still requires excessive concurrency between the development (testing) and production phases. By authorizing 3 new LRIP aircraft in FY-90, while at the same time placing test restrictions on obligation of FY-90 funds, the Committee is essentially counting on the test program to be successful. However, the history of the B-2 development program to date, as well as many other development programs, some of which are described above, strongly argue against this likelihood. Continued concurrency greatly increases the risks of increased program costs and/or possibly forcing a premature and unwarranted termination of the program if one or more of the FY-90 milestones are breached.

My recommended changes to the B-2 program, as detailed in a June 19 letter to Secretary of Defense Cheney, would be to suspend all additional LRIP until adequate technical and operational flight test results are available to justify resuming production. No aircraft would be authorized in FY-90; however, adequate funding would be provided in FY-90 for advance procurement, and to meet ongoing procurement contractual obligations.

If satisfactory flight test results are forthcoming during FY-89 and FY-90, LRIP could resume in FY-91 in accordance with an alternative procurement plan recently submitted by the Air Force to the Committee. This plan, developed as a result of my letter to Secretary Cheney, would provide for no procurement in FY-90, but would provide for 5 LRIP aircraft in FY-91.

According to the Air Force, this plan would add an estimated $1.7B to total program costs, but these costs would be amortized over the next several years of procurement, substantially reducing their fiscal year impact. But if the Air Force continues LRIP in FY-90 and the B-2 fails to pass one or more of its FY-90 milestones, it could cost much more than $1.7B to restructure the program yet again. Additionally, the failure of any FY-90 milestone might well force a termination of the program after an investment of over $22B.

In summary, we need to "fly-before-buy" in the B-2 program, and we should suspend production of any new aircraft until we have adequate technical and operational flight test data on which to justify continued production of the B-2. These required test results should provide the DOD decision makers, the Congress, and the American public with reasonable confidence that the most expensive combat airplane ever built can satisfactorily perform the missions it was designed and built to perform before any more aircraft are authorized for production.

I intend to bring this issue to the attention of the full Senate when the FY-90/91 Defense Authorization Act comes to the floor.

JOHN GLENN.

ADDITIONAL VIEWS OF MR. WIRTH

The Committee's consideration of the first defense budget of the 1990s comes at a time of profound change in East-West relations and for our own country. A decade ago, the Soviet invasion of Afghanistan rekindled the Cold War, and the United States under President Carter undertook an ambitious defense modernization program. Today, the Soviets are implementing unilateral force cuts in Eastern Europe, while the U.S. federal budget deficit has forced the fourth consecutive year of real decline in defense spending. These two factors—our deficit-limited resource base and previously unthinkable changes in East-West relations—define a new dynamic and set of challenges and opportunities for the national security debate of the 1990s.

During the 1980's, the U.S. experienced the largest defense expansion in our peacetime history. From 1980 to 1985, DoD's budget saw a 53 percent real growth in budget authority and a 100 percent real increase in investment accounts. Even at today's reduced level of spending, DoD's budget remains 36 percent higher in real terms than in 1980, and is still higher in constant dollars than it was at the height of the Vietnam War.

The result of this sharp increase in defense spending has been to obligate the United States to high defense expenditures in the 1990's in order to complete programs begun in the 1980's. The Bush Administration inherited a balance of prior year budget authority of $280 billion—and a shrinking resource base from which to fund these obligations. This so-called "bow wave" will place growing pressure on defense budgetting.

The Administration has begun to address this mismatch between fiscal reality and projected defense plans. According to General Accounting Office (GAO) estimates, DoD has already cut $311 billion from its planned spending for the FY88 and FY90 five year defense plans, mostly in future funding growth. Yet, according to the GAO, further reductions of $150 billion may be required in the FY90–94 FYDP to close the gap between likely funding and DOD's plans.

Additional spending cuts may be necessary for several reasons. First, the five-year defense plan (FYDP) for FY 1990–94 currently contains funding levels that exceed the President's own request by $45 billion. Given the optimistic economic assumptions already contained in the President's request, it is unlikely that an additional $45 billion above the President's request will become available.

Secondly, DoD's budget assumptions are based on an inflation rate that will begin at 3.6 percent in 1990 and steadily decline to a level of 1.7 percent by 1994. This projection contrasts with that of other government agencies, such as the Congressional Budget Office (CBO), which use an inflation rate of 4 percent over the next five years to calculate projected expenditures. If CBO estimates of future inflation rates prove to be more accurate than DoD predictions, the result will be another $48 billion in budget shortfall.

Thirdly, DoD budget figures are based on funding increases over the next five years of 1 percent over inflation in 1991 and 1992 and 2 percent over inflation in 1993 and 1994. In light of the continued need to cut the federal budget deficit and the difficult restraints those cuts will place on defense spending, real increases in defense spending are unrealistic. If defense funding remains constant in real terms over the next five years, DoD will have to cut an additional $54 billion to stay within budget guidelines.

These three factors suggest that the current FYDP may be facing a shortfall of $150 billion. In addition, the growing backlog of environmental problems at DoD and DoE facilities will clearly result in the need for additional funding over the next five years and beyond. The Defense Environmental Restoration Account, the Pentagon's "Superfund" for clean-up at facilities such as the Rocky Mountain Arsenal, is underfunded in the FY90–94 FYDP by $5–10 billion. The DoE nuclear weapons complex environmental account will require at least $30 billion over the next twenty years, accordingly to the DoE "2010 Study"; the severity of problems at DoE facilities such as Rocky Flats suggests that even more funding will be required if we are adequately to protect public safety and health. To this we must add the cost of environmental clean-up at the bases recommended for closure by the Base Closure and Realignment Commission.

At a minimum, these factors—the procurement "bow wave", the environmental clean-up backlog, and the optimistic assumptions contained in the current FYPD—will place continuing pressure on the defense budget. Secretary Cheney deserves great credit for having begun a process of more realistic budgeting in his amended budget submission for FY90 and in his recent direction to the Services to base their FY91 budget submissions on "zero real growth".

But even this recognition may not be sufficient if the Gramm-Rudman-Hollings deficit reduction program forces sequestered cuts based on the true federal deficit. If current "on budget" trust fund accounts in surplus, such as Social Security, are taken "off budget" our national deficit approaches $280 billion. If we were to apply the Gramm-Rudman-Hollings deficit reduction goal of $100 billion in FY90 to such a true accounting of our national spending imbalance, nearly $90 billion in sequestered cuts would be imposed on defense accounts in FY90.

These continuing pressures on the defense budget coincide with an emerging opportunity to reduce the risks and costs of the military confrontation in Europe through arms control. The economic incentive for seeking deep reductions in conventional forces has been an explicit part of the Soviet Union's new approach to East-West relations. But we too have powerful economic incentives to reduce deployments and spending through mutual agreement.

When the Committee marked up last year's defense authorization bill, few would have predicted such rapid and dramatic progress in conventional arms control. General Secretary Gorbachev's speech to the U.N. last December outlining large unilateral Soviet force cuts in Eastern Europe transformed the debate on conventional arms control. Less than three months after the convening of the formal negotiations in Vienna, President Bush added further impetus to the process by urging completion of a treaty on Conventional Armed Forces in Europe (CFE)—including limits on manpower and combat aircraft—within six months to a year.

The Vienna negotiations represent a genuine opportunity to wind down the costly military confrontation that has divided Europe for four decades. Should agreement be reached at the CFE talks, we can expect to see significant real savings. President Bush's proposal to limit U.S. and Soviet stationed forces in Europe to 275,000 is estimated to save approximately $2 billion annually. Deeper cuts to 50% of current NATO levels, as proposed by former SACEUR Andrew Goodpaster and MBFR Ambassador Jonathan Dean, will make very significant savings possible. Further, the structure of our armed forces, much of which is dedicated to the NATO mission, will change if the military equation in Europe is altered through negotiatons. Such changes will effect the mix of forces we dedicate to NATO contingencies, including U.S.-based reinforcements, as well as the overall structure of our defense establishment.

Such changes will not take place immediately, even in the accelerated CFE environment. Yet the pressures on our defense budget are immediate. The challenge we face in the 1990s will be to manage the defense build-down in a moree responsible and thoughtful manner than the defense build-up of the 1980s.

TIM WIRTH.

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